

# **D-Link**<sup>®</sup>

# **Cloud Management Service**

User Manual



# **Table of Contents**

Introduction	3
Terms and Concepts	3
The D-ECS Management Interface	5
Dashboard	9
Devices	12
Device Management	12
Navigate through the Device Management	12
In Use	17
Details	18
Config	21
Operations	22
Diagnostics	26
Stats	28
Inventory	
Inactive	
Favorites	
Scheduled Tasks	40
Tag Management	44
Upload OTA Files	45
Alert Rules	49
Status Report Time	53
Periodic Report Time	53
Heartbeat Time	54
Task Timeout Time	55
Licenses	56
Activated	56

Available
Reusable
Expired61
Organization
Organization Details
List
Structure
Floor Plan71
Organization Users
Permission
Activity Log
Appendix
Revision Note

# Introduction

D-ECS is a cloud management platform that removes the cost and complexity associated with owning and maintaining your corporate's network infrastructure. The platform is maintained by D-Link and access to D-ECS is through a web browser. D-ECS is a subscription-based service, and devices managed by the platform are individually licensed, allowing the system to scale with the requirements of an organization. Users can deploy, monitor, and configure their network devices imported to D-ECS. And for non-D-Link devices, you can obtain basic device information and monitor device status. Your organization's devices can also be grouped by their physical location into sites and can be configured for scheduled tasks. Users are granted privileges to access D-ECS based on roles, which restricts access to only functions that are permitted. D-ECS simplifies the management of your network and assets, reducing the workload of operation maintenance for network administrators by allowing large numbers of devices to be managed from a single interface. Devices can be pre-configured and delivered later to the designated organization, allowing network devices to be installed on site without requiring specialized IT knowledge. This streamlines installation and provisioning, which makes D-ECS an ideal solution for expanding and managing your new or existing network and further reducing management complexity of the network equipment in your organization. For example, when there are changes in device configuration or firmware, these changes can be pushed to the device via scheduled tasks. If a device is offline, it will try to connect to the D-ECS cloud continually until the connectivity is recovered. Once the device comes online, it automatically updates with the most recent configuration changes from D-ECS. Furthermore, administrators can rest assured that they will be notified instantly via email when a device's status changes.

## **Terms and Concepts**

This section provides a brief introduction and description of the terms and concepts used in the system.

**Organization Business Unit (OBU):** An OBU is a separate division or a branch office of a corporate in other regions. It sells network devices such as LTE and 5G devices along with D-ECS to customers and is responsible for providing the initial administrative accounts (through invitation) and provisioning devices and licenses to the subscribed service providers.

**Service Provider (SP):** A service provider is an entity that sells network devices and D-ECS to customers and is responsible for providing the initial administrative accounts (through invitation) and provisioning devices and licenses to the subscribed organizations. Within the D-ECS structure, service providers are considered clients of an OBU. A service provider has the option to take over the task of maintenance of an organization along with its devices when creating an organization. Examples of service providers include telco companies and systems integrators (SI).

**Organization (ORG):** An organization is a business entity that subscribes to D-ECS through an SP. An organization cannot manage other organizations since all organizations belong to the same level of the D-ECS hierarchy. Within the D-ECS structure, organizations are considered clients of an SP. Examples of organizations include enterprises and business firms.

**Site:** A site is a label representing a physical location. Sites are used to group devices together for easier management. Sites should contain exact location information including countries, cities, districts, and street address. The D-ECS structure uses regions, sites, and groups for device management according to their physical placement with the hierarchical order of **regions** > **sites** > **groups**. (Refer to **Organization** for more information.)

# The D-ECS Management Interface

The D-ECS management service is cloud based and can be accessed through a web interface with a valid username and password.

#### To log in to the D-ECS Management Interface:

1. Enter the URL: https://portal.decs.dlink.com/login



Are you a service provider? Sign up

- Enter a valid email and password at the login page. A valid account should be activated through email invitation. The activation process requires you to set a password with at least 8 characters and should contain at least one lower and upper case letter, one number, and one symbol such as !, @, #, \$, %, ^, &, \*, (, ), \_, +, -, =, [, ], {, }, and ].
- 3. Alternatively, select **Login with Google** or **Login with Microsoft** to use your Google or Microsoft account if you have created an account with either of these services.

The Login page also provides a Sign up page for service providers to sign up an account. Go through the sign-up process by filling in the following information:

• Service region information: Enter region, country, and time zone.

STEP 1 : Country	
Your new account and organization will be created on server.	
Service Region *	
Please Select ~	
Country *	
Please Select 🗸	
Time Zone *	
Please Select ~	
Next	
Back to login page	

• Business organization information: Enter country, organization name, location address, and phone number.

STEP 2 :	Organization	<	BACK
	Country *		
	AndorrA		
	Organization Name *		
	1 ~ 128 Characters		
	Address *		
	1 ~ 128 Characters		
	Phone *		
	Next		

• Account information summary: Verify your account information and agree to the **Terms** and **Privacy.** Click one of the following registration methods to continue:

**Continue Register with Email, Continue Register with Microsoft**, or **Continue Register with Google**.

STEP 3 :	Account	<	BACK
	Service Region *		
	DAU		
	Country *		
	AndorrA		
	Time Zone *		
	US/Central		
	Organization Name *		
	test		
	Address *		
	test		
	Phone *		
	12345		
	I have read and agree to the <u>Terms</u> and <u>Privacy</u> .		
	Continue Register with Email		
	OR		
	Continue Register with Microsoft		

• If you choose **Continue Register with Email**, please create your account. Enter the username and email for the account. Also enter the password and confirm it.

E-mail *	
Your password must:	
<ol> <li>be a minimum of 8 or more character</li> </ol>	8
<ol><li>Include a minimum of three of the following the fo</li></ol>	lowing mix of
character types: uppercase, lowercase	e, numbers, non-
character types: uppercase, lowercase alphanumeric symbols, for example !(	e, numbers, non- @#\$%^&*()_+-=[]{} '
character types: uppercase, lowercas alphanumeric symbols, for example !( 3. not be identical to your previous pass	e, numbers, non- @#\$%^&*()_+-=[[{]/ word or email address
character types: uppercase, lowercas alphanumeric symbols, for example !( 3. not be identical to your previous pass	e, numbers, non- @#\$%^&*()_+-=[]{}' word or email address
character types: uppercase, lowercase, alphanumeric symbols, for example !( 3. not be identical to your previous pass Password *	e, numbers, non- @#\$%^&*()_+-=[]{}I' word or email address
character types: uppercase, lowercase, alphanumeric symbols, for example !( 3. not be identical to your previous pass Password *	e, numbers, non- @#\$%^&*()_+-=[{}!' word or email address
character types: uppercase, lowercas alphanumeric symbols, for example ( 3. not be identical to your previous pass Password *	e, numbers, non- @#\$%^&*()_+-=[[} ' word or email address
character types: uppercase, lowercase, alphanumeric symbols, for example { 3. not be identical to your previous pass Password *	e, numbers, non- @#\$%^&*()_+=[[{}]' word or email address
character types: uppercase, lowercase alphanumeric symbols, for example !( 3. not be identical to your previous pass Password *	e, numbers, non- @#5%r&u,+=[]{}; word or email address
character types: uppercase, lowercase alphanumeric symbols, for example !( 3. not be identical to your previous pass Password *	e, numbers, non- gestisser0,-e-=10/r word or email address
character types: uppercase, lowercase alphanumeric symbols, for example ( 3. not be identical to your previous pass Password * Confirm Password *	e, numbers, non- @#\$%s*0_+-=[]0! word or email address
character types: uppercase, lowercase alphanumeric symbols, for example !( 3. not be identical to your previous pass Password * Confirm Password *	e, numbers, non- @#S%s*2*()_++=[](y) word or email address
character types: uppercase, lowercase alphanumeric symbols, for example !( 3. not be identical to your previous pass Password * Confirm Password *	e, numbers, non- @#\$%s*(s^0_)_+=[](y) word or email address
character types: uppercase, lowercase alphanumeric symbols, for example if 3. not be identical to your previous pass Password * Confirm Password *	e, numbers, non- gestisser0,-et-ellori word or email address Control of the second se

• The Registration success screen will be displayed.



You will be notified by an invitation email. Please follow the instructions in the email to activate your account.

# Dashboard

Devices continuously communicate status and network usage information back to the D-ECS cloud. Dashboard analytics are presented based on this information using graphs and charts and are updated regularly in the servers of the D-ECS cloud.

The Dashboard page is the first page after you log in to the management interface. This page provides a snapshot of device status and license information. The **Device Summary** displays the number of online and offline devices, inactive devices (i.e. service has been stopped, with expired licenses, or broken), and devices on the inventory. The **License Summary** (only available for an OBU and a service provider) displays the number of activated and expired licenses, as well as licenses that are available. The **Device Profile** gives the distribution of devices with respect to networking type or technology. The **My Staff Summary** (only available for a service provider) gives a summary of the registered users and their account types. The **Organization Account Summary** displays the names of organizations that are managed by the service provider (SP) (i.e. the service provider provides overall management service for the organization) along with the number of authorized users for management (refer to **List** of **Organization** for more information).

**Note:** The **Organization Account Summary** will not show any data if there are no organizations whose device and organization management tasks have been taken over by their service provider.

The table beneath the statistics provides the number of devices for each organization (or service provider depending on the user account) and links to the **Device Management**. You can click on an organization to go to the Device Management page to view detailed device information about devices belonging to the respective organization.

The **Update Summary** provides statistics on the number of devices with the latest firmware and those with older versions. The latest firmware version is based on the firmware file uploaded to the server (refer to **Upload OTA Files** for more information).

Note: The My Staff Summary as well as License Summary, which can be switched

between by clicking <sup>(C)</sup> in the upper-right corner, is only available if your account is

registered as an SP.

The **Google Map** (only available for an organization) at the lower left displays the location of devices that are currently online, offline, and inactive. You can switch to **Floor Plan** to display a visualization of the physical placement of the managed devices on a site map.

The dashboard layout is different for OBUs, service providers and organizations. This is the dashboard display for an OBU:



This is the dashboard display for a service provider:1



The following is a dashboard display for an organization:

<li></li>		🕀 English 🗘 🛞 🛞
Cinis_CRG V		с
Device Summary	Online Devices By Model	Device Profiles
	Model Disas-2010-01	Quantity 14 40/LTE M2M Gateway 10
23 Total Devices		5018 M2M Garway 5
Por Par V Por Par R4	演講室 日 日 日 日 日 日 日 日 日 日 日 日 日 日 日 日 日 日 日	Image: Source Summing       Image: Source Summing

A service provider can switch between the displays for an organization and a service provider by selecting among the entities at the top left (and likewise for an OBU to select among service providers and organizations):

ono Chris_ORG V					C
B Overview	Online Devices By Model		Device Profiles		
0R6 MacDonald	Model	Quantity		4G/LTE M2M Gateway	10
	DWM-3010-A1	1	14		
23 Total Dences	2		7	50NR M2M Guiteway	5
Online	entory		Lindate Summary		
4355 (52176) (34.785) (8	<u>n</u>				
				(Bullin Francis)	
Boy Plan		A 141	-	Device Himware	
		Cy Cox			
	□ 演講室 るで 8 ×		0% Updated	d 100% 14 Newest	7 Need to Update
	現在で				
	用 で A 2 5 年 1 用 で A 2 5 年 1 日	50% QQX			

## Devices

The Devices menu consists of the following submenus: **Device Management**, Scheduled Tasks, Tag Management, Upload OTA Files, Alert Rules, Status Report Time, and Device Profile.

## **Device Management**

The Device Management is designed to make it easy to set up and centrally manage all your devices in one place in the cloud.

Device Manag	gement	4G / 9	5G CPE	~											
In Use	Inventory		inactive	Favorites											
Search Q		«	All Device F	Online liter +	Offline							5	. 0		P
ORG ORG-2				Device Name 🖕		Serial Number	Organization	Status	IMEI	IP Address					
				DOM-550GSO-A1_	ZZ23B00019	ZZ23B00019	DEMO	중 Offline	357748929005950	10.52.67.121			$\bigcirc$	5	P
				DOM-550GSO-A1_	ZZ23B00015	ZZ23B00015	ORG-1		357748929005919	10.59.31.193	$\heartsuit$	0	$\bigcirc$	Eð	P
				DOM-530TSO-A1_	ZZ23A00083	ZZ23A00083	ORG-2	○ Online	357748929005661	192.168.0.148	$\heartsuit$	0	$\bigcirc$	6	P
			Total Qty	:3 1 ∽ record.	/ per page	< 1 >									

**Note:** Device registration is required for remote management through D-ECS. Refer to **Appendix** for device registration through D-ECS.

## Navigate through the Device Management

A device can be listed in any of these tabs that represent its state of service: In Use, Inventory, and Inactive. Next to the title of the page (Device Management) is the product category drop-down list which distinguishes the major categories of the imported devices. The Favorites tab lists devices that have been added to the Favorites list for fast access. To list devices under an organization, click on the node of the organization in the left pane, which displays the hierarchy of the business entities. If you are a service provider, organizations shown in the left pane with green nodes allow you to manage their devices, whereas gray nodes prevent management from an SP. This section describes the functions for efficient inventory management and proper device maintenance and operation.

## Search for a Device

You can create filters to filter the devices based on a number of properties. To create a filter, click the **Device Filter+** button, enter the keyword(s) for the following parameters: **Device Name, Group, Serial Number, Model, Tags, IP Address, IMEI/IMSI/ICCID, Device/Module FW Version, Expiring Licenses(days)**, and **Last Check-in Time**.

Device Name	Group	
	Please Select	~
Serial Number		
Tags	Model	
IP Address	IMEI	
Module FW Version	IMSI	
Device FW Version		
Expiring Licenses(days)		
Last Check-in Time		
<b>#</b>		

#### Notes:

- 1. If you log in as an OBU or a service provider, the parent node lists all the devices under the parent entity as well as devices under its subordinates. If you would like to list devices only under this parent entity, enable the Devices Under *the parent entity name* toggle.
- 2. Users with the monitor role do not have the permission to perform the management functions instructed in this section by default.

#### Tag a Device

This operation is only available for devices that are currently in use. Tags can be managed in the Tag Management page (refer to **Tag Management**).

Note: Tagging devices is not granted to users with the monitor role by default.

To tag a device:

1. Select device(s) in the list, then select  $\bigcirc$  in the upper-right corner for multiple

devices or select  $\bigcirc$  at the end of the row for a single device.

- 2. Select the tag(s) from the Available Tags drop-down menu. Up to 5 tags can be selected for a device. Then click Assign to confirm your selection, which is listed under the Assigned Tags area.
- 3. Click **OK** when being asked for confirmation of device binding.
- Click Submit to add the tag(s) to the device(s). If you want to retract your selection, click Restore.

Assign 1	Tags for Device			$\times$
Device				
	Device Name	Organization	Tags	
	DWM-313-A1_T30U111000051	Store-No.1	Floor02 🗙 Flo	or01 ×
Available	Tags			
Please S	Select		~	Assign
Each devic Assigned Floor02	e can assign up to 5 tags. Tags Floor01 X			
Resto	re		Cancel	Submit

## Move Devices to a Group

This operation is only available for devices that are currently in use. Groups can be managed in the **Group** page (refer to **Group** under **Organization**).

**Note:** Group assignment is not granted to users with the monitor role by default. To move a device to a group:

1. Select device(s) in the list, then select  $\approx$  in the upper-right corner for multiple

devices or select  $\bigotimes$  at the end of the row for a single device.

2. Use the **Group Filter** to filter groups. Select the region with the **All** option to list all groups under the parent region (or organization). Or select a particular region and then select the site to list available groups under this site.

5.

- 3. Select the desired group for this device.
- 4. The Effective Numbers shows how many devices will be moved. To alter the list

of effe	ctive	devices, clic	k details	; :=	on the	right.
Click S	ubmit	t.				
Move De	evice to G	roup				$\times$
Organiz	zation US I	branch office				
Select a Group * Group F	Group as	a Destination				Create New Group
	Group			Site	Region	
	unlabell	ed				
	site-gro	up-US				
	test					
Effective N O	lumbers					i
					Cancel	Submit

### Add Devices to Favorites

This operation is only available for devices that are listed under In Use. To add

device(s) to **Favorites**, select the device, then click  $\bigcirc$ . The device should also be also listed under the Favorites tab.

Device Name 🗸	Serial Number	Organization	Status	IMEI	IP Address		
DOM-550GSO-A1_ZZ23B00019	ZZ23B00019	DEMO	令 Offline	357748929005950	10.52.67.121	♡ ⊜	S 🕫 🖉
DOM-550GSO-A1_ZZ23B00015	ZZ23B00015	ORG-1	Online     On	357748929005919	10.59.31.193	• 😔	S 🕫 🖉
DOM-530TSO-A1_ZZ23A00083	ZZ23A00083	ORG-2	Online     On	357748929005661	192.168.0.148	$\heartsuit$	S 🖬 🖉

#### Deactivate a Device

Product deactivation renders a device unusable.

**Note:** Product deactivation is not granted to users with the monitor role by default. To deactivate a product:

- 27 1. Select the device, then click
- 2. Select the cause of deactivation from one of the following categories: **Stop Service**

RMA for broken devices

Decommissioned and back to the inventory

	License Deactivation		×
	1 device selected to deactivate for DLink US Company.		
	Please Select a Reason *		
	<ul> <li>Stop Service</li> </ul>		
	<ul> <li>RMA for broken devices</li> </ul>		
	<ul> <li>Decommissioned and back to the inventory</li> </ul>		
	Description *		
	Please input clear description for this action. Maximum characters are 2	2,048 characters in UTF-8.	
		Cancel	
_			
3.	State the reason in <b>Description</b> .		
4.	Click Deactivate.		
	License Deactivation	×	
	1 device selected to deactivate for TM_IT_Boun.		
	Please Select a Reason *		
	Stop Service		

	Please input clear description for this action. Maximum characters are 2,048 characters in UTF-8.	
	Cancel Deactivate	
The	device will then be placed in the appropria	te category of the <b>Inventory</b> or
Inac	tive tab according to the specified reason.	Moreover, the remaining duration of
the s	subscription period will be listed under the	Reusable tab of the Licenses menu.

## Extend License for a Device

RMA for broken devices

Description \*

Decommissioned and back to the inventory

This operation is only available for devices that are currently in use. Product license can be extended if there are available licenses.

Note: Product activation is not granted to users with the monitor role by default.

To extend a license for a product:

- 1. Select the device, then click  $\checkmark$
- 2. Select the license term from the available licenses.
- 3. The Effective Numbers shows how many devices will be applied with the new

license term. To alter the list of effective devices, click details  $\stackrel{ imes}{=}$  on the right.

4. Click Submit.

Extend Lic	ense		
DWM-3	313		
Choose Licer	nse Type *		
3 month	s Available Quantity: 1, Selected Quantity: 0		
0 1 year	Available Quantity: 1, Selected Quantity: 0		
O 2 years	Available Quantity: 0, Selected Quantity: 0		
3 years	Available Quantity: 2, Selected Quantity: 0		
O Reusable	Available Quantity: 0, Selected Quantity: 0		
Effective Nur	nbers		
1			
		Cancel	Submi
		Gunder	

## In Use

The devices listed under the **In Use** tab are activated and operational. This section describes features for managing these devices (online or offline). To view the list of devices in use, click **Device Management > In Use.** Then select the product category from the drop-down list at the top: 4G/5G CPE

In Use	Inventory	Inactive	Favorites										
Search	۹ «	All	Online Offline										
SP DEMO		Device	Filter +							8			
ORG ORG-2			Device Name 🗸	Serial Number	Organization	Status	IMEI	IP Address					
			DOM-550GSO-A1_ZZ23B00019	ZZ23B00019	DEMO	令 Offline	357748929005950	10.52.67.121		8	$\bigcirc$	6	P
			DOM-550GSO-A1_ZZ23B00015	ZZ23B00015	ORG-1	⑦ Online	357748929005919	10.59.31.193	$\heartsuit$	0	$\bigcirc$	28	P
			DOM-530TSO-A1_ZZ23A00083	ZZ23A00083	ORG-2	○ Online	357748929005661	192.168.0.148	$\odot$		0	5	P

You can customize the displayed properties (hide or reveal the column) by clicking

at the end of the table.

**Device Name** – Name of the device.

Serial Number – The serial number of the device.

Organization – The organization that this device belongs to.

Activation Time – The license activation time of the device.

**Status –** The online/offline status of the device.

Tags – The device tags for easy identification and search.

Group – The group where the device belongs.

**IMEI –** The International Mobile Equipment Identity is a unique number assigned to every mobile device.

**IMSI** – The SIM/USIM/UICC card has a unique number called an International Mobile Subscriber Identity (IMSI). This is used to identify and authenticate users on cellular devices.

**ICCID** – The Integrate circuit card identity is a unique number assigned to each SIM card.

**RSRP** – Reference Signal Received Power (RSRP), which measures the power level of the signal for the LTE and 5G network.

**RSRQ** – Reference Signal Received Quality (RSRQ), which measures the signal level and quality for the LTE and 5G network.

IP Address – The IP address of the device.

Model Name – The model name of the device.

Device FW Version – The firmware version of the device.

Module FW Version – The firmware version of the cellular module.

**Cellular Signal** – Signal strength indicator: the more lit bars, the better the signal. **Lost Connection within 24 hours** – The total number of times the system did not receive status report from this device in 24 hours.

**Last Check-in Time** – The latest status report from this device that the system received.

## Details

The **Details** tab provides a summary of the device information including interface settings and network statistics. It displays information on device settings, cellular interface, Ethernet WAN interface, LAN clients, and WLAN clients. To view this information, click **Device Management > In Use**, then click on the device to bring up the device information side menu.

≪ ☆ / Dev	ice Management /	CPE / In Use				DOM-550GS0-A1_ZZ23B0	0015 《始目》
Device Manag	gement 40	6 / 5G CPE 🗸				i <b>=</b> • <sub>0</sub>	% <sup>©</sup> E
In Use	Inventory	Inactive Favorites				Report Time: Overview	2024-09-18 17:21:43 C
Search SP DEMO ORG ORG-1	۹ «	All Online Offline Device Filter +	]			New Table	Seeling Base
ORG ORG-2		Device Name  DoM-550GS0-A1_ZZ23B00019	ime 3 09:35:50	Expiration Time 2026-03-06 09:35:51	Lost Connection within 24	新北 oyuan 北面	Taipei 臺北 聖古里 十 一
		DOM-550GSO-A1_ZZ23B00015	9 09:49:08	2027-09-14 09:49:09	8	Organization	ORG-1
						Model	DOM-550GSO-A1
		DOM-530TS0-A1_ZZ23A00083	3 16:08:09	2026-09-23 16:08:10		MAC	48ee0cadee96
						Connection Type	EthDHCPCellular
		Total Qty: 3 1 Y record / per page	< 1 >			Manufacturer	D-Link
						Serial Number	ZZ23B00015
						IMEI	357748929005919
						Firmware	1.00.01beta
						Control Agent	1.00.13.020
						License Agent	1.00.30
						Device License Period	2024-09-09 to 2027-09-14
						Device Uptime (i)	6 days, 7:11:1
						STUN	OFF
© D. Link Corneration	All rights reserved					Description	

**Report Time** – Shows the timestamp of the following information. You may click  $^{C}$ 

to refresh the information. You may also click to discover the device to obtain more in-depth data for device configurations. The Discovery operation takes longer than the Refresh operation.

#### Overview

The map at the top displays the current location of the device.

Device Name - Name of the device. It is unique and can be used to identify the

device. You can modify it by clicking  $\swarrow$  in the upper-right corner next to the

displayed name.

**Organization** – The organization which the device belongs to.

Model – The model name of the device.

MAC – The MAC address of the device.

**IP** – IP address assigned to the interface.

**Connection Type** – The Internet connection method.

Manufacturer – Manufacturer of the device.

**Serial Number** – The serial number of the device.

IMEI – International Mobile Equipment Identity.

Firmware – The firmware version number installed.

License Agent – The current agent version for license management.

**Control Agent** – The current agent version for device management.

**Device License Period** – The period during which the device has been activated from YYYY-MM-DD to YYYY-MM-DD.

**Device Uptime** – The active length of time in days and hours:minutes:seconds that the device has been up. Click (i) to display device uptime history. **Description** – A description for this device.

### Cellular Interface 1

Network Name – The name of the mobile operator.

Current Use – The cellular technology used on this interface.

MNC – The Mobile Network Code.

MCC – The Mobile Country Code.

IMSI – The International Mobile Subscriber Identity.

Band – The LTE frequency band.

**RSRP** – Reference Signal Received Power(RSRP), which measures the power level in the LTE cell network.

**SINR** – Signal-to-interference-plus-noise ratio, which measures the quality of wireless signal by taking account of noise and other interfering factors.

**RSRQ** – Reference Signal Received Quality (RSRQ), which measures the signal level and quality in the cellular network.

Signal Level – The signal strength measured in dBm.

**RSSI** – Received Signal Strength Indication, which measures the power of a received radio signal.

**TAC** – The Type Allocation Code, which indicates the manufacturer and model of the device.

Cell ID – Indicates the cell tower or site.

Manufacturer – Manufacturer of the device.

Software Version – The software version information for the router.

**APN Configuration** – Access Point Name (APN), which sets up a network connection to enable Internet access through cellular communication.

#### Wireless

The following information identifies the available wireless networks:

**SSID** – The name of the Wi-Fi network.

**BSSID** – The MAC address of the Wi-Fi interface.

Channel – The channel assigned for this Wi-Fi network.
Transmit Power – The level of transmission power.
Total Bytes Sent – Number of bytes sent through this network.
Total Bytes Received – Number of bytes received through this network.
Total Packets Sent – Number of packets sent through this network.
Total Packets Received – Number of packets received through this network.
Total Packets Received – Number of packets received through this network.
Total Packets Received – Number of packets received through this network.

### **Connected Clients**

The connected clients through both Ethernet cables and wireless radios are displayed with the following information: Interface – The interface for connectivity with the network device. Name – The host name of the client. IP Address – The IP address of the client device.

MAC Address – The MAC address of the client device.

Note: The above information varies depending on the functionality of your model.

## Config

The Config tab allows you to adjust the settings of your wireless network.

≪ ☆ / Device Management / CPE / In Use				⑦ DWM-550-	A1_T3111270000	15	O	616 E)	>>>
Device Management 4G / 5G CPE ~				=	00	R	Q;	E	
In Use Inventory Inactive Favorites				Report Time:			2022-11-1	6 15:09:17	С
Search Q	Offline			Enter '0' to use	e the location infor	ng mation report	ted from the devi	ce.	~
SP US-branch Device Filter +				Latitude					
Device Name 🗸	Serial Number	Organization	Status	1 Longitude					
DWM-550-A1_T31112	7000015 T311127000015	Store-No.1	令 Offline	0					
DWM-313-A1_T30U1	11000051 T30U111000051	Store-No.1	令 Offline					Apply	/
DWM-312-A2_T30C1	JC000001 T30C1JC000001	Store-No.1	令 Offline 🧧						

**Note:** Users with the monitor role do not have the permission to perform the configuration functions instructed in this section by default.

## Manual Latitude & Longitude Settings

Enter the latitude and longitude settings for the device to be used for displaying location-related information. Enter "0" to use the location information reported from the device.

## Operations

The **Operations** tab allows you to perform maintenance tasks such as firmware update and system configuration backup and restoration.

evice Managemen	40	6 / 5G CPE	~				:= °0	×	Ŷ	E
In Use Invento	ry	Inactive	Favorites				Report Time:		2024-09-1	8 17:21:43
Search	<u>م</u> «	All Device I	Online Off	line			Reboot the device			Reboot
ORG ORG-2			Device Name 🗸	îme	Expiration Time	Lost Connection within 24	Reset Reset the device			
			DOM-550GS0-A1_ZZ238 DOM-550GS0-A1_ZZ238	300019 3 09:35:50 300015 9 09:49:08	2026-03-06 09:35:51	8				Reset
			DOM-530TSO-A1_ZZ23A	00083 316:08:09	2026-09-23 16:08:10		Firmware Upgrade Current Firmware Version			1.00.01b
		Total Qty	<b>1:3</b> 1 ✓ record / per p	age < 1 >			Firmware File No Option Data			~
									Firmw	are Upgrade
							Configuration Import			
							Please Select			~

Notes:

- 1. Users with the monitor role do not have the permission to perform the operation functions instructed in this section by default.
- 2. The operations described in this section require the device status to be online.

## Firmware Upgrade

The system allows you to upgrade firmware of both the device and cellular module. To upgrade the device firmware, click anywhere on the row of the device to bring up the

device information side menu. Click **Operations** in the top pane, scroll down to **Firmware Upgrade**, choose a firmware file from the list, then click the **Firmware Upgrade** button. Note that you will need to upload the firmware files to the server first

#### before performing firmware update (Refer to Upload Firmware File to the Server.

Firmware Upgrade	^
Current Firmware Version	V01.00.0.009_09221230
Fireware File	
Test	~
Firmware Note: Test	
Succeeded in firmware upgrade	
Requested: 2021-10-01 16:28:24	
	Firmware Upgrade

#### Reset

To reset a device, click anywhere on the row of the device to bring up the device

information side menu. Click **Operations**  $\stackrel{\bigotimes}{\sim}$  in the top pane, scroll down to **Reset**, then click Reset. Confirm your operation. You can cancel the reset process before it completes.

Reset	^
Current Firmware Version	01.00.00.30
Reset the device	
Succeeded in reseting the device Requested: 2021-10-01 15:35:46	
	Reset

### Reboot

To Reboot a device, click anywhere on the row of the device to bring up the device

information side menu. Click **Operations** in the top pane, find the **Reboot** option, then click **Reboot**. Confirm your operation. You can cancel the reboot process before it completes.

Reboot	^
Current Firmware Version	01.00.00.30
Reboot the device	
Succeeded in rebooting the device	
Requested: 2021-10-01 15:05:46	
	Reboot

### **Configuration Import**

Configuration Import can be used to restore your device to an earlier configured state if the current configuration file is not operating as required or if you would like to revert changes to several settings. To import configurations, click anywhere on the row

of the device to bring up the device information side menu. Click **Operations** in the top pane, scroll down to **Configuration Import**, then click **Import Config File**. The available configuration files for import will be listed in **Upload OTA Files > Device Config File**. The system will show a warning sign stating that there are no configuration files on the system, and it will require you to upload a configuration file first. (Refer to **Upload Configuration File to the Server** for more information.)

		Configuration Import	^
		Current Firmware Version	V01.00.0.006
		Deploy Device Config	
200200000000000000000000000000000000000		DWM-311-B1-test	~
Configuration Import	^	Config Note: test	
Current Firmware Version V0'	1.00.0.009_09221230		
Deploy Device Config		Requested:	
DWM-313-A1_T30U111000051_20211005	~	Finish:	
Test		()	
DWM-313_T30U107000005		Succeeded in config deploy	
DWM-313_T30U107000005_20211004		Requested: 2022-02-21 18:22:29	
DWM-313-A1_T30U111000051_20211005			Import Config File

## **Configuration Export**

To export device configuration as a single file, click anywhere on the row of the device

to bring up the device info side menu. Click **Operations** in the top pane, scroll down to **Configuration Export**, then click **Download Config File**. You can cancel the export process before the process is complete. Once the export is completed, it will

inform you whether it is a success or failure.

The configuration file will then be sent to the requester by email. Go to **Organization** > **Organization Users** for more information on users and email settings.

Configuration Export	~
Current Firmware Version	01.00.00.30
System will send config file by email to this account	
Requested:	
Finish:	
<ul> <li>succeeded in config download</li> </ul>	

Download Config File

### System Logs

The Log File Download allows you to download system logs concerning kernel activities or system operation. You can cancel the operation before it is complete. To download system logs, click anywhere on the row of the device to bring up the

device information side menu. Click **Operations** in the top pane, scroll down to **Log Files**, then click **Download Device System Logs**. You can cancel the download process before it is complete. Once the process is completed, it will display **System logs downloaded**.



The log file will be sent to the requester by email. (Refer to **Organization Users in Organization** for more information on users and email settings.)

## **Application Logs**

The Log Files Download allows you to download application logs concerning management activities on the system. You can cancel the operation before it is complete. To download application logs, click anywhere on the row of the device to

bring up the device information side menu. Click **Operations** in the top pane, scroll down to **Log Files**, then click **Download Device Application Logs**. You can cancel the download process before it is complete. Once the process is completed, it will inform you whether it is a success or failure.



The log file will be sent to the requester by email. (Refer to **Organization Users in Organization** for more information on users and email settings.)

## Diagnostics

The Diagnostics tab provides tools to help you troubleshoot network issues. In addition, it allows you to monitor the health of your network.

#### Notes:

- 1. Users with the monitor role do not have the permission to perform the diagnostic functions instructed in this section by default.
- 2. The functions described in this section require the device status to be online.

### Ping

Use the Ping diagnostic tool to get the status of another device on the network. To ping a device, select the **Interface** for the source interface of the command, enter the destination IP address for **Host**, enter the **Number of Repetitions** for the number of requests, and enter the **Timeout** value (milliseconds) and **Data Block Size** (bytes) to specify the packet size to be sent. Then click **Apply** to start the test. The ping results

#### will be displayed below.

Ping	~		
Interface * Cellular 1 Host *	~	Result Last Get Data Time Success Count 10	2022-01-07 11:24:03
8.8.8.8		Average Response Time (ms)	
Number of Repetitions *		40	
10		Maximum Response Time (ms)	
Timeout *		45 Failure Count	
Data Block Size *		Minimum Response Time (ms)	
100		38	
		Diagnostics State	
	Apply	Complete	

### Trace Route

The Trace Route utility test the connectivity between the device and another one on the network. To trace route a device, select the **Interface** for the source interface of the command, enter the destination IP address for **Host**, enter the **Number of Tries** to specify the number of queries for each hop and the **Timeout** value (milliseconds) for each reply, and enter **Data Block Size** (bytes) as well as **Max Hop Count** for the maximum number of hops. Then click **Apply** to start the test. The trace route results will be displayed below.

Trace Route	^	
Interface *		
Cellular 1	~	
Host *		
8.8.8.8		
Number of Tries *		
3	Result	
Timeout *	Last Get Data Time	2022-02-22 14:19:02
100	Diagnostics State	
Data Block Size *	Complete	
33	Result	
Max Hop Count *	traceroute to 8.8.8.8	30 hops max
30	* () 0 ms 0 ms 0 m 49.114.20.172 (172.20. * () 0 ms 0 ms 0 m 211-77-0-163.adsl.fetm	s 114.49) 29 ms 27 ms 30 ms s et.net (211.77.0.163) 32 ms 30 u

## **Download Test**

The Download Test measures the rate at which the content is being transferred to the device from the server in the cloud.

To start the Download Test, select the interface for receiving the download file, select the file size for the download data, then click **Apply**. The results will be displayed below.

		Result	
		Last Get Data Time	2021-10-05 10:09:19
		Diagnosis State	
Download Test	^	Complete	
Interface *		Total Bytes Received	
Cellular 1	~	5243211	
Download File Size *		Download Duration	
5MB	~	14.990404	
		Download Speed	
	Apply	349771.16	

### **Upload Test**

The Upload Test measures the rate at which the content is being transferred out of the device to the server in the cloud.

To start the Upload Test, select the interface for sending the upload file, select the file size for the upload data, then click **Apply**. The results will be displayed below.

		Result	
		Last Get Data Time	2021-10-05 11:09:05
		Diagnosis State	
Upland Toot	~	Complete	
opioau rest		Total Bytes Received	
Interface *		10496192	
Cellular 1	~	10400105	
Upload File Size *		Upload Duration	
10MB	~	32.228636	
		Upload Speed	
	Apply	325368.501	

## Stats

The Stats page displays statistics of cellular and Wi-Fi data relating to signal quality

and data usage. For the following statistics, you can click

to send the

逊

information to your account's registered email.

## Cellular Signal Quality – SINR/RSRQ/RSRP

Signal to Interference plus Noise Ratio (SINR): The Signal-to-Interference-plus-Noise Ratio (SINR) indicates the signal quality with respect to interference in LTE and 5G network.

Reference Signal Received Power (RSRP): The Reference Signal Received Power (RSRP) indicates the estimated power level of signals in LTE and 5G network. Reference Signal Received Quality (RSRQ): The Reference Signal Received Quality (RSRQ) indicates the signal quality of LTE and 5G network.

The RSRP, RSRQ, and SINR information is displayed graphically.



Mouse over (i) to obtain information about the classes in quality as shown in the

#### following table:

Fair	-103 to -111	-9 to -12	10 to 7		
Good	-85 to -102	-5 to -9	12.5 to 10		
Excellent	> -84	> -5	> -12.5		
Quality	RSRP (dBm)	RSRQ	SINR (dBm)		
Cellular RF Signal Quality Reference					

.

You can then determine your signal quality by referencing this table.

## Cellular Usage

The cellular usage shows the amount of data being transferred through the selected cellular interface including the upload and download data.

Download data: The amount of data that is being transferred to the cellular interface. Upload data: The amount of data that is being transferred to the Internet. The following graph shows the usage data:



### LAN Usage

The LAN usage shows the amount of data being transferred through the selected LAN interface including the upload and download data.

Download data: The amount of data that is being transferred to the LAN interface.

Upload data: The amount of data that is being transferred to the Internet.

The following graph shows the usage data:



## Wi-Fi Usage

The Wi-Fi usage shows the amount of data being transferred through the wireless Ethernet interface including the upload and download data.

Download data: The amount of data that is being transferred to the wireless interface.

Upload data: The amount of data that is being transferred to the Internet.

The following graph shows the usage data graphically:



## **Connected Clients**

The Connected Clients information shows the number of clients connected to the wireless network with respect to time.



## Inventory

The Inventory tab lists devices not being deployed to any organization. The **New Imported** tab lists devices that are imported to the system. The Inventory also contains the **Decommissioned** tab to list devices that are deactivated because of decommissioning. It provides essential inventory functions: device import, activation, deliver, and deletion on the Inventory.

Click **Device Management > Inventory** to see the following information:

**Device Name** – Name of the device. It is unique and can be used to identify the device.

Import Time – The time that the device was imported to the server.

Serial Number – The serial number of the device.

**Status** – The import status of the device, i.e. Success, Duplicated (duplicated devices with the current inventory list), Error (unsuccessful import of the device).

Model – Model name of the device.

Device Manager	4G / 5G CPE	~							C
In Use I	nventory Inactive	Favorites					Invent	ory Hi	story
New Imp     Device Filter	Decommissioned								Ū
D	evice Name		Import Time 🧹	Serial Number	Status	Model			
D'	WM-312-A2_T30C105000168		2022-07-08 14:02:30	T30C105000168	⊘ Success	DWM-312-A2		Ŷ	Ū
D	WM-312-A2_T3091I2000010		2022-07-08 14:03:31	T3091I2000010	Success	DWM-312-A2	8	Ŷ	Ū
D	WM-311-B1_T31110C000002		2022-07-08 14:03:58	T31110C000002	⊘ Success	DWM-311-B1	<b>E</b> 5	$\hat{\underline{\mathbf{v}}}$	Ū
□ D'	WM-311-B1_T31110C000005		2022-07-08 14:05:08	T31110C000005	⊘ Success	DWM-311-B1	8	$\hat{\underline{\mathbf{v}}}$	Ū
_ di	wm-3010-a1_T31L129000009		2022-12-15 10:34:07	T31L129000009	▲ Duplicated	DWM-3010-A1			Ū

For every import, there is a record showing the import time, the account that performs device import, the number of devices that were successfully imported, duplicated, or failed to import. Click the **Import Devices** drop-down menu and select

**Inventory History** 

Inventory History

to display records of import history.

Import Devices to D-ECS

Importing devices to D-ECS requires a list of device serial numbers. The list can be saved in \*.xls , .xlsx, or .csv format.

To import devices to D-ECS:

1. Go to **Device Management**, select **Inventory**, then select **Import Devices** at the top right, and then select **Import Devices** at the top right.

- 2. Choose **Upload File** to upload a file with a list of devices or **Enter SN Manually** to enter serial numbers manually.
- 3. Put a description for this import in the **Description** field.
- 4. Click **Choose File** to choose the file to be uploaded, then click **Submit** to start the import process.
- 5. Review the summary of the import, then confirm the import by clicking **OK**.

Import De	avices	$\times$
Import To McDonal	ds	
<ul><li>Upload</li><li>Enter S</li></ul>	i File IN Manually	
Descripti test	Import Devices ×	
Please inj Upload F <u>Check ex</u>	Import to McDonalds Description test	
Notice 1. The 2. You	Cancel OK	
Choose	File DWM-311-B1-EC25-E_ Chris_3pc-DECS-02.csv	
	Cancel	iit

**Note:** Be sure to check the status of the inventory list to verify if the devices have been successfully imported to the system.

The	following	shows	how the	data	should	be	recorded	in a	.xls file:
		0110110			0110 414	~~ .			

	А	В	С	D	E
1	T31110C000002				
2	T31110C000003				
3	T31110C000005				
4					
5					
6					
7					
8					
9					

The following shows how the data should be recorded in a .csv file:

T31110C000002 T31110C000003

T21110C000000

T31110C000005

You can also add devices manually using the form provided on the web page shown

#### below:

Import Devices		×
Import To US branch office		
<ul> <li>Upload File</li> <li>Enter SN Manually</li> </ul>		
Description *		
Import to US		
Please input clear description for this upload action. Maximum characters ar Serial Numbers *	e 2,048 characters in UTF-8	
T31110C000006		
+		
	Cancel	Submit

Click + to add serial numbers one after another.

If the import is successful, you will be able to view the list of imported devices under the **New Imported** tab.

For devices under the New Imported and Decommissioned list, you can perform the following actions: device activation, device delivery or retrieval (or return), and deletion.

#### To activate a device:

1. Select the device(s) and click Activate Device(s). For a single device, click

the end of the row. For multiple devices, click at the top of the table.

 Select the license term: 3 months, 1 year, 2 years, 3 years or reusable license plans from the remaining term of device deactivation. The Effective Numbers shows how many devices will be activated under this license plan. To alter the list

of effective devices, click details  $\equiv$  on the right.
Device Activation for TM_IT_Boun	×
DWM-3010	
Choose License Type *	
3 months Available Quantity: 0, Selected Quantity: 0	
1 year Available Quantity: 0, Selected Quantity: 0	
2 years Available Quantity: 0, Selected Quantity: 0	
3 years Available Quantity: 0, Selected Quantity: 0	
Reusable Available Quantity: 2, Selected Quantity: 0	
Effective Numbers	
1	
1	
	Cancel Submit

Once a device is activated, it will be listed in the **In Use** tab instead. Note that devices that are activated can be deactivated later.

### To deliver a device:

- 1. Select the device(s) and click Deliver Device(s) <a>[</a></a>
- 2. Select the client organization (i.e. a direct subordinate in the list) as the delivery destination.
- 3. Write a description for this displacement.
- 4. Click **Submit** to start the delivery process.

In Use Inventory	Inactive Favorites				⊌ Import Devices ∨
Search Q « SP US-branch ORS Store-No.1	Deliver To* Deliver To* Please Select	× ~			7 5 ° ú
one Store-No.2	Description *		atus ) Success	Model DWM-311-B1	
	Effective Numbers 1	=			
	Cancel Su	ubmit			

You can then view the device under the destination organization.

#### To retrieve a device:

This option is only available after a device has been delivered to a customer listed as a subordinate.

1. Select the device(s) and click Retrieve Device  $\frac{1}{2}$  at the end of the row for a

single device or click  $\stackrel{\frown}{=}$  at the top right for multiple devices.

2. Write a description for this retrieval.

3. Click **Submit** to start the retrieval process.

In Use	Inventory	Inactive	Favorites				😒 Inve	ntory H	History
Search SP US-branch ORG Store-N	Q «	. Nev Device	Retrieve Devices Retrieve From To Store-No.1 US-branch Devices	×			E	3 <u>û</u>	È Ū
ORG Store-N	0.2		uescription *			Model			
			Please input clear description for this upload action. Maximum characters are 2,048 characters in UTF-8.		ated	DWM-3010-A1			Ŵ
			Effective Numbers	.=	SS	DWM-311-B1	20	$\underline{\hat{\mathbf{U}}}$	Ū
					SS	DWM-312-A2	5	$\underline{\hat{\mathbf{v}}}$	Ŵ
			Cancel Sul	bmit	SS	DWM-312-A2		$\underline{\mathbf{\hat{v}}}$	Ŵ
		Total Qty	:4 1 V record / per page <   1   >						

You can then view the device under the entity of your organization (or directory).

## To return a device:

This option is only available for customers listed as subordinates after a device has been delivered.

1. Select the device(s) and click **Return Device**  $\sim$  at the end of the row for a

single device or click  $\checkmark$  at the top right for multiple devices.

- 2. Write a description for the return.
- 3. Click **Submit** to start the return process.

In Use Inventory	Inactive Favorites				L Import Devices V
Search Q «	Return Devices Return From Return To US-branch DTW Description *	×			i C 💀 S
ORG Store-No.2			itatus	Model	
	Please input clear description for this upload action. Maximum characters are 2,048 characters in UTF-8. Effective Numbers		⊘ Success	DWM-311-B1	1 🖓 🖓 🖬
	Cancel Subm	it			

The device will be returned to the parent organization (or directory).

### To delete a device:

Select the device(s) and click Remove Device(s)

	۱	4	I	1
)	1	1		1

# Inactive

Devices listed under the Inactive tab are classified in 3 categories: **Stop Service**, **Expired**, and **Broken**. Stop Service are reported malfunction due to a variety of

reasons (e.g. hardware maintenance or software update) in which users may specify when they deactivate a device. Expired devices are due to license expiration. **Broken** are devices sent for Return Merchandise Authorization service as specified by users when they deactivate a device.

Click **Device Management > Inactive** to see the following information:

**Device Name** – Name of the device. It is unique and can be used to identify the device.

Import Time – The time that the device was imported to the server.

Serial Number – The serial number of the device.

**Group** – The group where the device belongs.

Model – Model name of the device.

**Status** – The current operating status of the device.

**Event Description** – Describes the cause of inactivity. The description is filled in by user as the reason for deactivating a device.

For devices in the **Inactive** category, you can reactivate it.

### To reactivate a product with a valid license:

1. Select the device, then click

at the end of the row. Or select multiple

devices, then click at the top right.

- 2. Choose the License Type that are available for this product model.
- 3. The **Effective Number** displays the number of devices being selected. Click is to see device list and detailed information and alter your selection.
- 4. Click **Submit** to confirm your action.

# **Favorites**

The Favorites tab lists devices that have been added to Favorites. To access devices under this category, click **Device Management > Favorites**. The following information is displayed for the devices in the list:

**Device Name** – Name of the device. It is unique and can be used to identify the device.

Serial Number – The serial number of the device.

**Organization** – The organization that this device belongs to.

Status – The status of the device.

Group – The group where the device belongs.

**IMEI** – The International Mobile Equipment Identity, which is a unique number assigned to every mobile device.

**IMSI** – The SIM/USIM/UICC card has a unique number called an International Mobile Subscriber Identity (IMSI). This is used to identify and authenticate users on cellular devices.

**ICCID** – The Integrate circuit card identity is a unique number assigned to each SIM card.

**RSRP** – Reference Signal Received Power (RSRP), which measures the power level for the LTE cell network.

**RSRQ** – Reference Signal Received Quality (RSRQ), which measures the signal level and quality for the LTE cell network.

IP Address – The IP address of the device.

Model Name – Model name of the device.

Device FW Version – The firmware version of the device.

Module FW Version – The firmware version of the cellular module.

Cellular Signal – The more lit bars, the better the signal.

**Lost Connection within 24 hours –** The total number of times the system did not receive status report from this device in 24 hours.

**Last Check-in Time** – The latest status report from this device that the system received.

### To add a device to Favorites:

- 1. Go to Device Management and select the In Use tab.
- 2. Select the device, then click  $\heartsuit$  .
- 3. The device should also be listed under the **Favorites** tab.

# Scheduled Tasks

The scheduled tasks are created to perform defined administrative tasks according to set schedules on selected devices. The tasks that can be set to perform automatically whenever the device comes online or periodically include reset, reboot, configuration deployment, firmware upgrade.

### Notes:

- 1. Operations related to scheduled tasks are not granted to users with the monitor and supervisor role by default.
- 2. For configuration deployment and firmware, uploading the respective files will be required. (Refer to **Upload OTA Files** for more information.)

To view the configured tasks, click **Scheduled Tasks** under **Devices**, and select the **General** tab.

The following information will be displayed:

Task Name: Name of the task

Scheduled Task: Type of the task

**Succeed:** Number of devices completed the task and the Percentage of task completeness (number of devices completed the task/total number of devices selected)

**Failed**: Number of devices failed the task and the Percentage of task failure (number of devices failed the task/total number of devices selected)

**Canceled**: Number of devices being canceled, and the Percentage of task canceled (number of devices being canceled while it is waiting to be executed/total number of devices selected)

**Skipped**: Number of devices being omitted and the Percentage of such omission (number of devices being omitted of the task/total number of devices selected). The reason for omission could be device offline or occupied with other tasks.

**Task Status:** The executing status of the task, i.e. **Queuing** (waiting to be executed based on the schedule), **Running** (executing now), **Complete** (task has already been done or the schedule has been successfully programmed on the device), or **Canceled** (task being canceled by user), or **Fail** (task failed)

Schedule Time: Scheduled time for the task.

Scheduled Tasks											C
General Smart OTA											🔿 Reboot 🗸 🗸
Search Q «	Filter	+									
SP US-branch ORG Store-No.1		Task Name	Schedule Task	Succeed	Falled	Canceled	Skipped	Task Status	Туре	Schedule Time 🗸	
		311-reboot	Reboot	0 0%	1 100%	0 0%	0 0%	Complete	Schedule	2022-08-25 22:50:00	$\odot$
		311-reboot	Reboot	1 100%	0 0%	0 0%	0 0%	Complete	Schedule	2022-08-25 21:50:00	$\otimes$
		311-reboot	Reboot	1 100%	0 0%	0 0%	0 0%	Complete	Schedule	2022-08-25 20:50:00	$\otimes$
		311-reboot	Reboot	1 100%	0 0%	0 0%	0 0%	Complete	Schedule	2022-08-25 19:50:00	$\otimes$
		311-reboot	Reboot	1 100%	0 0%	0 0%	0 0%	Complete	Schedule	2022-08-25 18:50:00	$\odot$
		311-reboot	Reboot	1 100%	0 0%	0 0%	0 0%	Complete	Schedule	2022-08-25 17:50:00	$\otimes$
		311-reboot	Reboot	0 0%	0 0%	0 0%	1 100%	Complete	Schedule	2022-08-25 16:50:00	$\otimes$
		311-reboot	Reboot	1 100%	0 0%	0 0%	0 0%	Complete	Schedule	2022-08-25 15:50:00	$\otimes$
		311-reboot	Reboot	1 100%	0 0%	0 0%	0 0%	Complete	Schedule	2022-08-25 14:50:00	$\otimes$
	_										
	Total Qt	(:24 1 ∨ record	/ per page < 1	2 3 >							

To create a scheduled task:

1. Select the task from the drop-down menu at the top right: **Reboot, Reset, Config Deploy,** and **Firmware Upgrade**.

Scheduled Tasks																C
General Smart OTA														ļ	Q	Reboot 🗸
Search Q «	Filter	+													C 181	Reset Config Deploy Firmware Ungrade
SP US-branch ORG Store-No.1		Task Name	Schedule Task	Su	cceed	Fai	iled	Car	celed	Sk	ipped	Task Status	Туре	Schedule Time 🗸	*	Module Upgrade
		311-reboot	Reboot	0	0%	1	100%	0	0%	0	0%	Complete	Schedule	2022-08-25 22:50:00	1	$\odot$
		311-reboot	Reboot	1	100%	0	0%	0	0%	0	0%	Complete	Schedule	2022-08-25 21:50:00	1	$\odot$
		311-reboot	Reboot	1	100%	0	0%	0	0%	0	0%	Complete	Schedule	2022-08-25 20:50:00	1	$\odot$
		311-reboot	Reboot	1	100%	0	0%	0	0%	0	0%	Complete	Schedule	2022-08-25 19:50:00		$\odot$
		311-reboot	Reboot	1	100%	0	0%	0	0%	0	0%	Complete	Schedule	2022-08-25 18:50:00	1	$\odot$
		311-reboot	Reboot	1	100%	0	0%	0	0%	0	0%	Complete	Schedule	2022-08-25 17:50:00		$\odot$
		311-reboot	Reboot	0	0%	0	0%	0	0%	1	100%	Complete	Schedule	2022-08-25 16:50:00		$\odot$
		311-reboot	Reboot	1	100%	0	0%	0	0%	0	0%	Complete	Schedule	2022-08-25 15:50:00	1	$\odot$
		311-reboot	Reboot	1	100%	0	0%	0	0%	0	0%	Complete	Schedule	2022-08-25 14:50:00		$\odot$

- 2. The respective task wizard appears.
- Name your task then click Next. Special characters such as ^[~!@#\$%^&\*()+=:;,.<>\/?]\*\$ are not allowed.

Reboot Scheduled	Task Wizard		×
1	2	(3)	- (4)
Settings	Device Selection	Scheduled Task	Review
Step 1 - Set reboot re	elated settings		
Organization TM_	IT_Boun		
Task Name *			
Reboot-daily			
		C	ancel Next

4. For Config Deploy and Firmware Upgrade, select the device model first. Then For

**Firmware Upgrade** and **Config Deploy**, select the firmware file and configuration file respectively (note that the names of the firmware files or configuration files can be obtained from **Upload Firmware File to the Server** and **Upload Configuration File to the Server**).

- Select devices on which to perform the defined task. You can filter the devices using one or a combination of these properties: Model (only applicable with firmware upgrade and configuration deployment), Group, IMEI Range, MAC Address Range, and Tag.
- 6. The number of selected devices will be displayed under Effective Numbers. You

can click Details  $\stackrel{i\equiv}{=}$  to show detailed device information. Then click **Next** to continue. Note that the effective number must be at least one or an error will be shown when submitting the task at the end of the configuration.

Reboot	Scheduled Tas	sk Wizard			×
(	) —	_ 2 _	(3)		(4)
Sett	ings	Device Selection	Scheduled Task		Review
Step 2 -	Select devices f	or reboot			
Organ	ization TM_IT_B	Boun			
Filter Typ	e *				
By Grou	ıp				~
Group *	Filter +				
	Group		Site	Region	
	unlabelled				
	group_1				
	test-TM_IT_8	BOUN			
Effective	Numbers				
1					∷
			Cancel	Back	Next

7. Select the timing for the task: Now, Schedule, or Repeatable (for Reboot only). Select Now to start the defined task immediately. Also select the number of times to execute this task (up to 10) with timed interval: 1 hour, 3 hours, or 6 hours. Select Schedule and define the Start Time (date and time) for this task. For multiple execute times, select the number of times (up to 10) to execute this task with the timed interval: 1 hour, 3 hours, or 6 hours. Note that if you select multiple times, you will see multiple entries for the same task. Select Repeatable and define the frequency of performing the automatic task from the Cycle drop-down menu: Daily or Weekly. For weekly, select the desired day of the week for the schedule. For both options, select the time to start the task with the 24-hour clock. Then click

Next to continue.

**Note:** The status of **Complete** refers to different configuration mechanism of scheduled tasks depending on the timing of the task. If the timing is **Now**, Complete status means that the task has been executed. If the timing is **Repeatable**, Complete status means the defined task has been programmed on the selected devices. (Please make sure that the repeatable task is what you intend before setting it.) For **Schedule** timing, Complete status means the defined task has been executed.

Reboot Scheduled Task Wizard	×
Settings Device Selection	Scheduled Task Review
Step 3 - Set auto reboot scheduled task	
Organization TM_IT_Boun	
Type *	Cycle *
Repeatable ~	Weekly
Day of Week	Run at *
Sun 🗸	00:01:02
	Cancel Back Next

8. A Preview of the configured scheduled task will be displayed. Click **Submit** to finish the setting of scheduled task.



# Tag Management

Tagging is useful in finding your devices as the number of your devices grows. To view the configured tags, go to **Devices** > **Tag Management**.

Note: Tag management is not granted to users with the monitor role by default.

The following information will be displayed:

Tag Name: Name of the tag.

Color: Color of the tag for better visibility.

Tagged Devices: Number of devices assigned with this tag.

You can edit a tag 🖉 or delete it 🔟

To create a tag:

Click Create Tag in the upper-right corner, enter a keyword in the Tag Name field,

select the Tag Color for distinguishability, then click Submit.

Create Tag			×	
Tag Name *	Tag Color			
	D		~	
		Cancel	Submit	
		19	1111	

You can then use the pre-defined tag when adding tags to your devices (refer to **Tag a Device** in **Device Management**).

To list devices with a specific tag, click on the row of a tag name.

# **Upload OTA Files**

The Upload OTA Files page allows you to upload and store firmware files for the system and device configuration files on the server in the cloud.

## Upload Firmware File to the Server

Uploading firmware file to the server is required for subsequent firmware upgrade. (Go to **Device Management > Operations > Firmware Upgrade** and **Scheduled Tasks**.)

To upload firmware, go to **Devices > Upload OTA Files**:

1. From the **Upload OTA Files** at the left pane, click the **Device Firmware File** tab, choose the entity in the left pane to upload the file to, then click **Upload New** 

Fir	mwa	ire

Upload New Firmware

button at the top right.

2. Choose the designated device model from the **Device Model** drop-down list. Click **Next** to continue.

Upload New Firmware Wizard			×
1	(2)		3
Select Model	Upload File		Review
Step 1 - Choose Device Model			
Upload file to US branch office			
Device Model *			
DWM-311-B1			~
Device Model * DWM-311-B1			
		Cancel	Next

- Enter a descriptive name for the firmware in the Firmware Alias Name field. The alias will be shown in the available firmware files for firmware upgrade (refer to Firmware Upgrade in Device Management) and Scheduled Tasks (refer to Scheduled Tasks).
- 4. State the Version number for the firmware. Select the Firmware Image Type from either one of the following: Full Image for complete image or Delta Image for incremental firmware image. Delta image reduces the size of the image file and therefore reduces network bandwidth requirement for faster

update delivery to accommodate frequent changes in firmware.

- 5. Select the **Previous Version Dependence** to specify the firmware dependency for the Delta Image firmware type.
- 6. Click **Choose File** to specify the firmware file to be uploaded.
- 7. The value for **MD5 Checksum**, calculated by system automatically, will be displayed. The MD5 checksum is used for verifying the integrity of the firmware file.
- 8. Write a note of the new firmware in the **Release Note** field.
- 9. Select whether the firmware file should be encrypted. (Unless otherwise specified, do not encrypt the firmware.)
- 10. Click **Next** to continue.

Upload New Firmware Wizard		×
Device Model DWM-311-B1		
Upload file to US branch office		
Firmware Alias Name *		
DWM-311-B1 Firmware		
Version *		
0.5.8		
Firmware Image Type *		
Full Image (All-in-One Firmware)		<b>~</b>
Previous Version Dependence *		
None		~
Upload Firmware File *		
Choose File DWM_311_V01.00.1.006.bin		
MD5 Checksum		
55815d79eb77364f28e322a96f147a2e		
Release Note *		
New Firmware version for DWM-311		
Encrypt Firmware *		
O Yes		
UNU UNI		
	Cancel Back Next	

- 11. Review the information of the uploaded firmware image settings.
- 12. Click **Submit** to start uploading the firmware image.

Upload New Firmware Wizard			2
			- 3
Select Model Upload File			Review
Step 3 - Review upload new firmware settings			
Select Model			
Device Model * DWM-311-B1			
Upload File			
Firmware Alias Name * DWM-311-B1_Firmware			
Version * 0.5.8			
Firmware Image Type * Full Image (All-in-One Firmware)			
Previous Version Dependence * None			
Upload Firmware File * DWM_311_V01.00.1.006.bin			
MD5 Checksum 55815d79eb77364f28e322a96f147a2e			
Release Note * New Firmware version for DWM-311			
Encrypt Firmware * false			
	Cancel	Back	Submit

## Upload Configuration File to the Server

Uploading configuration file to the server is required for subsequent import of system configuration.

- 1. At the Upload OTA Files tab from the left pane, click the Device Config File tab, then choose the entity in the left pane to upload the file to.
- 2. Click Upload New Configuration
- Upload New Configuration

. The **Upload** 

- New Configuration Wizard appears.
- 3. Select the model for configuration file upload from the **Device Model** drop-down menu, then click Next.
- 4. Fill in an alias from the configuration file. The alias will be shown in the available configuration files for Configuration Import (refer to Configuration Import in Device Management) and Scheduled Tasks (refer to Scheduled Tasks).
- 5. Upload the configuration file by clicking **Choose File** to locate and select the configuration file from your local directory.

- 6. The **MD5 Checksum** is displayed. The MD5 checksum is used for verifying the integrity of the configuration file.
- 7. Fill in the **Release Note** to describe this file.
- 8. Review the summary of the upload settings. Then click **Submit** to start the upload process.

Upload New Configuration Wizard				×
Ø ———	- 🕗 –			- 3
Select Model	Upload File			Review
Step 3 - Review upload new configuration set	ttings			
Select Model				
Device Model * DWM-321-D1				
Upload File				
Config Alias Name * Config file for DWM-321-D1				
Upload Config File * T30V10B000006_2022-01-07 10-15-36_	_config.bin			
MD5 Checksum f256f26c4a3a5975474846c34d068fa7				
Release Note * upload new config file for DWM-321-D1				
		Cancel	Back	Submit

# Alert Rules

The **Alert Rules** page allows you to create rules to send email notifications automatically when devices' statuses change or when network traffic surpasses a certain level.

Note: Only administrators and managers can create alert rules by default.

The following information was displayed for alert rules created:

Rule Name: The name for the rule.

Rules: The condition of the rule.

Status: The status of the rule. Complete means the rule was effective in the past.Running indicates the present time is within the duration of the effective time span.

**Queuing** indicates the alert rule is going to be effective in the future. **Period:** The effective duration of the rule.

You can view detailed rule information by double-clicking on the rule.

To create a rule, go to **Devices > Alert Rules**.

- 1. Choose the appropriate tab at the top: **Status Monitoring** or **Traffic Usage** to create alert rules for device status change or traffic growth.
- 2. Choose the appropriate organization from the left pane, then click +Add Alert Rule

+ Add Alert Rule button at the top right. The Add Status Monitoring Alert Rule

Wizard or Add Traffic Usage Alert Rule Wizard appears.

3. Fill in the following information for Status Monitoring:

Rule Name: Give a name for this rule.

Alert Rule: Select one of the following conditions for alert: Online to offline, Offline to online, or Device status changed for both states of status change. Rule Note: Write a brief description for this rule.

**Send Emails to Recipients:** Select the available users which are the accounts of the respective organization from the drop-down list. You can select more than one user to be the recipients of the alert.

**Filter Type:** Select the filtering criteria to filter the devices for the alert. You can select multiple criteria.

The Effective Numbers shows the number of devices selected. To alter the list of

selected device	s, click ∷							
Add Status Monitoring Alert Rule Wizard								
1 —	(2)	— <u>(</u> 3) —		4				
Settings	Device Selection	Scheduled Task		Review				
Step 1 - Set alert rule	e related settings							
Add status monito	oring alert rule to DTW Office.							
Rule Name *								
Status Change								
Alert Rule *								
Online to offline				~				
Rule Note *								
Status Change								
Send Emails to Recipie	ents *							
Please Select				~				
			Cancel	Next				

Or fill in the following information for Traffic Usage:

Rule Name: Give a name for this rule.

Interface Type: Select one of the available interfaces: LAN, WAN, or WLAN.

**Channel:** Select the available ports for the **LAN** interface and connection method for **WAN**. Or select the wireless frequency for WLAN.

**Threshold:** Select the threshold value and the corresponding unit for triggering the alert.

Rule Note: Write a brief description for this rule.

**Send Emails to Recipients:** Select the available users which are the accounts of the respective organization from the drop-down list. You can select more than one user to be the recipients of the alert.

**Filter Type:** Select the filtering criteria to filter the devices for the alert. You can select multiple criteria.

The Effective Numbers shows the number of devices selected. To alter the list of

selected devices, click :=

Add Traffic Usage	Alert Rule Wizard		×
1 -	(2)	(3)	(4)
Settings	Device Selection	Scheduled Task	Review
Step 1 - Set alert rul	e related settings		
Add traffic usage	alert rule to DTW Office.		
Rule Name *			
Traffic Volume Ale	rt		
Interface Type *			
WAN			~
Channel *			
PPPoE			~
Threshold *		Unit	
1000		GB	~
Rule Note *			
bulk transfer			
Send Emails to Recipi	ients *		
Chris-OBU, Sophie			~
		Ca	ncel Next

4. Select Period for the defined rule to be effective. Select Working at Specific Time to define the specific duration in 24-hour clock time that the alert rule will be applied every day in this defined time span. If you do not specify Working at Specific Time, you will receive alert notifications anytime during the day when the specified conditions are met.

Add	Status Monitoring	Alert Rule Wizard				×
	—	— ⊘ —		3		(4)
Step	settings 3 - Set alert rule sche	duled task	S	cheduled Task		Review
Or	rganization TM_IT_BC	bun				
Period	2022-02-07 14:35:0	0 to 2022-02-28 14:35:0	D			
Worki	ng at Specific Time *					
	00:01:02		to 🤇	02:03:04		
				Cancel	Back	Next

5. A summary of the task will be displayed. Click **Submit** to finish the creation of the alert rule and close the wizard.

Add Status Monitoring Alert Rule Wizard				$\times$
⊘ ⊘ _		<ul> <li>-</li> </ul>		4
Settings Device Selection	Sc	cheduled Tasl	k	Review
Step 4 - Review status monitor alert rule settin	gs			
Settings				
Rule Name * Alert rule for Status Change				
Alert Rule * Online to offline				
Rule Note * For test only				
Send Emails to Recipients * albert				
Device Selection				
Filter Type * By Group, By Tag				
Group	Site		Region	
unlabelled				
321Group1				
321Group2				
Available Tags				
Effective Numbers 10				
Scheduled Task				
Period * 2022-01-25 09:54:00.000 - 2022-01-27 09	:54:00.000			
Working at Specific Time * 01:01:ss to 01:01:02				
		Cancel	Back	Submit

# **Status Report Time**

The Status Report Time page allows you to configure status report timing with the managed devices. There are 3 types of report timings that you can manage: **Periodic Report Time**, **Heartbeat Time**, and **Task Timeout Time**.

# Periodic Report Time

Periodic Report Time sets the timing of the device status report for information about managed devices on the Device Management page, for instance, the connection parameters on the device details page (refer to **Details** in **Device Management**).

Model Name: The device model name.

Periodic Report Time: The time interval for sending the status report.
Last Applied Time: The time that the latest Periodic Report Time setting was applied.
However, the value will be set on the device immediately only if the device is online.
For offline devices, the value will be set once the devices become online.
Total Quantity: The number of devices that will be affected by the new timing.

You need first to add device model to the Periodic Report Time list: Select the organization from the left pane and click **+Add Device to List** at the top right, then select the desired model from the available model list. This will add the periodic report timing of all the devices of the selected model to the designated organization. Note the **Total Quantity** column shows the number of affected devices.

To modify the periodic report time for a model:

1. Select the organization from the left pane and select desired model to be

modified, click Edit 🦉

- 2. Select **Available Periodic Report Time** from the following options: Every 12 hours, Every 24 hours, Every 36 hours, and Customize (Minutes). For customized time, please enter a value larger than 1 minutes.
- 3. **Apply to All Online Devices:** Enable this option to overwrite the above report timing to all devices of this model when they become online. Disable this option to keep the default report timing of 24 hours.
- 4. Click **Submit** to apply the new settings.

# Heartbeat Time

Heartbeat Time sets the timing of the heartbeat messages, which are used for communicating firmware version for firmware upgrade (refer to **Scheduled Tasks**).

The following information is displayed:
Model Name: The device model name.
Heartbeat Time: The time interval for sending the heartbeat message.
Last Applied Time: The time that the latest Heartbeat Time setting was applied.
However, the value will be set on the device immediately only if the device is online.
For offline devices, the value will be set once the devices become online.
Total Quantity: The number of devices that will be affected by the new timing.

To modify the heartbeat time for a model:

- 1. Select the desired model to be modified, then click **Edit**  $\checkmark$ .
- 2. Select **Available Heartbeat Time** from the following options: By 1 hour, By 3 hours, By 6 hours, By 12 hours, and Customize (Minutes). For customized time, please enter a value larger than 10 minutes.
- 3. Apply to All Online Devices: Enable this option to overwrite the above heartbeat timing to all devices of this model when they become online. Disable this option to keep the default heartbeat timing of 15 minutes.
- 4. Click **Submit** to apply the new settings.

# Task Timeout Time

The Task Timeout Time sets the timeout value for scheduled tasks operation (refer to **Scheduled Tasks**).

The following information is displayed:

Model Name: The device model name.

**Task Timeout Time:** The timeout value for the scheduled task. The scheduled task will be aborted if it is not completed within this time.

Last Applied Time: The time that the latest Task Timeout Time setting was applied. However, the value will be set on the device immediately only if the device is online. For offline devices, the value will be set once the devices become online.

Total Quantity: The number of devices that will be affected by the new timing.

To modify the task timeout time for a model:

- 1. Select the desired model to be modified, then click Edit  $\checkmark$ .
- Select Available Task Timeout Time from the following options: Within 15 minutes, Within 30 minutes, Within 45 minutes, Within 60 minutes, and Customize (Minutes). For customized time, please enter a value larger than 15 minutes. This timeout value applies to all scheduled tasks for the designated model.
- 3. **Apply to All Online Devices:** Enable this option to overwrite the above timeout timing to all devices of this model when they become online. Disable this option to keep the default timeout timing of 15 minutes.
- 4. Click **Submit** to apply the new settings.

# Licenses

The **Licenses** page helps you track all licenses purchased for your devices. The devices managed by D-ECS are subscription-based products.

**Note:** Only administrators and managers have full access to license management by default.

Licenses											С
Activated Available	Reusab	le Expired									
Search Q «	License	Filter +									
SP US-branch ORG Store-No.1		Device SN	MAC Address	License Key	Time Remaining	Term	Customer Po	Order Time	Import Time 🗸	Start Time	
		T31I127000015	48ee0caddd4b	0987242EE72882412480	42	3 months	90days	2022-08-19 08:00:00	2022-08-19 17:13:45	2022-11-16 15:01	1:03
		T30U111000051	48ee0cadc9e2	0987242EE72882412012	921	3 years	test	2022-07-12 08:00:00	2022-07-12 15:52:35	2022-07-15 17:08	8:06
		T30C1JC000001	48ee0cad983f	0987242EE72882412009	920	3 years	test	2022-07-12 08:00:00	2022-07-12 15:50:03	2022-07-12 16:13	3:46
	Total Qt	y:3 1. ∨ record/	per page 🧹 🗌								

# Activated

To obtain devices that have a valid license, click the **Activated** tab. The following information is displayed:

**Device SN**: The serial number of the device.

MAC Address: The hardware address of the device.

License Key: The digital key for product subscription.

Time Remaining: The number of days left until the subscription expires.

Term: The period for the license.

Customer Po: Customer purchase order.

**Order Time:** The date and time in yyyy-mm-dd, hours, minutes, and seconds when the license is purchased.

**Import Time:** The date and time in yyyy-mm-dd, hours, minutes, and seconds when the license is imported to D-ECS.

**Start Time:** The date and time in yyyy-mm-dd, hours, minutes, and seconds when the subscription starts.

**Expiration Time:** The date and time in yyyy-mm-dd, hours, minutes, and seconds when the subscription ends.

Activated	Available	Reusable	Expired									
Search	۹ «	License	Filter +									
SP TM_IT_Boun			Device SN	MAC Address	License Key	Time Remaining	Term	Customer Po	Order Time	Import Time	Start Time	
ORG McDonalds	5		ZZ1234567890	005018112501	9B184E880BABFB452278	365	1 year	DUS TEST 20210924	2021-09-24 08:00:00	2021-09-24 17:00:55	2022-01-11 15:00:41	1 20
ORG MQ_DTA	ł	View 1 - 100	of 1 100 🗸 per pag	₽< 1 >								

# Available

The Available licenses tab lists licenses that are purchased but have not been used by any device. The following information is displayed:

License Key: The digital key for product subscription.

Term: The period for the license.

Customer Po: Customer purchase order.

**Order Time:** The date and time in yyyy-mm-dd, hours, minutes, and seconds when the license is purchased.

**Import Time:** The date and time in yyyy-mm-dd, hours, minutes, and seconds when the license is imported to D-ECS. You can assign licenses to an organization to make them available for device activation for the assigned organization.

Licenses						C
Activated Available	Reusable Expired					🛛 Assign 🗸 🗸
Search Q	K License Filter +					
SP TM_IT_Boun	License Key	Term	Customer Po	Order Time	Import Time	
ORG McDonalds	✓ 5B32D00A8B0B89914385	3 months	00010-OP-21000321-1.000	2021-05-14 08:00:00	2021-05-17 09:35:25	
ORG MacDonald	AF0D27F1E5B60572E033	3 months	00010-0P-21000321-1.000	2021-05-14 08:00:00	2021-05-17 09:35:25	
ORG Subway	019E2A9D9E74345F7987	3 months	00010-0P-21000321-1.000	2021-05-14 08:00:00	2021-05-17 09:35:25	
	49A6DF94BE6D91982746	3 months	00010-0P-21000321-1.000	2021-05-14 08:00:00	2021-05-17 09:35:25	0
	B1891E86D4763D131420	3 months	00010-0P-21000321-1.000	2021-05-14 08:00:00	2021-05-17 09:35:25	
	DCF99976AE9C5EC7D092	3 months	00010-0P-21000321-1.000	2021-05-14 08:00:00	2021-05-17 09:35:25	
	9E94CEBFB6B4E7C48451	3 months	00010-0P-21000321-1.000	2021-05-14 08:00:00	2021-05-17 09:35:25	
	View 1 - 10 of 8 10 $\sim$ per page < 1 >					

The system allows SP/ORG admins to import a device license. To import a license:

- 1. Click **Import Licenses** at the top right. The **Import Device Licenses** screen appears.
- 2. Chose Upload Licenses Keys File to upload a licenses keys file or Enter Licenses Keys Manually to enter licenses keys manually.
- 3. Enter a description for this import.
- 4. Click **Submit** to start the import process.

Import Device Licenses	×
Upload License Keys File     Enter License Keys Manually	
Upload File * <u>Check example file</u>	
Notice: 1. The import file must be *.xls / *.xlsx / *.csv 2. You can upload 1,000 records of device licenses in every import.	
Choose File Description *	
Please input a clear description for this license import. The maximum number	r of characters allowed is 2,048 in UTF-8
	Cancel Submit

To assign a license, click the parent entity in the left pane, click on a license from the

list and click Assign to Assign Licenses	. Then select a subordinate to	dispatch the license to. $\times$
Assign To		
Selenium_SI		~
Effective Numbers		
1		:=
	Cancel	Submit
After a license has been a	assigned, you can revert the assi	gnment by retrieving it.
To retrieve a license, click	on it and click <b>Retrieve License</b>	(s) ♀.
Retrieve Licenses		×
Retrieve From Selenium, Sl	Retrieve To US branch office	
Effective Numbers		

Cancel

You can also return an assigned license to its original owner (i.e. a superior entity), To

return a license, click Return License(s)

Ξ

Return Licenses			$\times$
Return From TM_IT_Boun	Return To D-ECSAdmin		
Effective Numbers			
1			:=
		Cancel	Submit

# Reusable

The Reusable tab lists licenses that are not currently activated but have remaining time from device deactivation (refer to **Deactivate a Device** in **Device Management**). Theses licenses can be used when you activate a device or reactivate a device. (Refer to **Inventory** and **Inactive** for more information.)

The following information is displayed:

License Key: The digital key for product subscription.

Term: The period for the license.

Customer Po: Customer purchase order.

**Order Time:** The date and time in yyyy-mm-dd, hours, minutes, and seconds when the license is purchased.

**Import Time:** The date and time in yyyy-mm-dd, hours, minutes, and seconds when the license is imported to D-ECS. You can assign licenses to an organization to make it available for device activation for the assigned organization.

Time Remaining: The number of days left until the subscription expires.

Activated Available	Reusable Expired					🛛 Assign 🗸 🗸
Search Q. «	License Filter +					
SP Global-SP	License Key	Term	Customer Po	Order Time	Import Time 🗸	
ORG Chris-ORG	0987242EE72882412499	3 months	test	2022-08-30 08:00:00	2022-08-30 09:14:10	<u> </u>
ORG J&Q Shop	0987242EE72882412496	3 months	test	2022-08-29 08:00:00	2022-08-29 14:50:47	<u>\$</u>
	0987242EE72882412482	3 months	test	2022-08-24 08:00:00	2022-08-24 14:43:04	<u>\$</u>
	0987242EE72882412440	3 years	DTW_TEST_20220713	2022-07-13 08:00:00	2022-07-13 14:54:42	<u> </u>
	0987242EE72882412417	3 months	DTW_TEST_20220629	2022-06-29 08:00:00	2022-06-29 09:30:37	<u><u><u></u></u></u>
	0987242EE72882412415	1 year	DTW_TEST_2022062	2022-06-29 08:00:00	2022-06-29 09:28:54	<u>\$</u>

Depending on the business entity that you have registered to, you can perform license retrieval, return, and assignment as instructed in the above topics for available licenses. In addition, you can perform group operation for licenses, for instance, to assign licenses by term, click **Assign** at the top of the table, the **Assign Licenses By Term** window appears:

1. Select license term from the **Term** drop-down menu.

- 2. Select **Quantity**. Note that the available quantity depends on the available number of licenses with respect to the specified term.
- 3. Select a subordinate to dispatch the selected license(s).
- 4. Click Submit.

Assign Licenses By Term				$\times$
Term *		Quantity *		
Please Select	~	0		
Available Count: 0				
Assign To *				
Please Select				$\sim$
			Cancel	Submit

To retrieve licenses based on license terms, click **Retrieve** from the **Assign** button at the top of the table, the **Retrieve Licenses By Term** window appears:

- 1. Select a subordinate to retrieve the license from.
- 2. Select license term from the **Term** drop-down menu.
- 3. Select **Quantity**. Note that the available quantity depends on the available number of licenses with respect to the specified term.
- 4. Click Submit.

Retrieve Licenses By Term				$\times$
Retrieve From *				
D-link				~
Term *		Quantity *		
Please Select	$\sim$	0		
Available Count: 0				
Retrieve From		То		
D-link		US branch office		
			Cancel	Submit

To return licenses based on license terms, click the **Return** from the **Assign** button at the top of the table, the **Return Licenses By Term** window appears:

- 1. Select license term from the **Term** drop-down menu.
- 2. Select **Quantity**. Note that the available quantity depends on the available number of licenses with respect to the specified term.
- 3. Click **Submit**.

Return Licenses By Term				$\times$
Term *		Quantity *		
Please Select	$\sim$	0		
Available Count: 0				
Return from		Return To		
TM_IT_Boun		D-ECSAdmin		
			Cancel	Submit

# Expired

The Expired tab lists licenses that are expired. The following information is displayed: **License Key:** The digital key for product subscription.

**Term:** The period for the license.

Customer Po: Customer purchase order.

**Order Time:** The date and time in yyyy-mm-dd, hours, minutes, and seconds when the license is purchased.

**Created Time:** The date and time in yyyy-mm-dd, hours, minutes, and seconds when the license is created.

**Expiration Time:** The date and time in yyyy-mm-dd, hours, minutes, and seconds when the license expires.

Activated	Available	Reusable	Expired						
Search	۹ «	License Filte	r +						
SP US-branch ORG Store-No.	1	Lic	ense Key	Term	Customer Po	Order Time	Expiration Time	Created Time 🗸	
ORG Store-No.2	2	09	87242EE72882412479	3 months	90days	2022-08-19 08:00:00	2022-11-29 15:19:27	2022-08-19 17:13:06	
		09	87242EE72882412478	3 months	90days	2022-08-19 08:00:00	2022-11-22 17:16:12	2022-08-19 17:12:26	
		Total Qty : 2	1 Y record / per page	< 1 >					

# Organization

The Organization page displays the organizations composed of these entities: OBU, service providers, and organizations. The type of entities that you can view depending on the business entity that you have registered to. It allows you to create new entities as well as modify your existing ones.

**Note:** Only administrators and managers are allowed to create and maintain organizations on this page by default.

The following information is displayed: Activated: Self-registered or invited D-ECS accounts must click on the verification link in the email to finish activation.

Name: The name of the organization.

**Business Partner:** The business entity that sold devices to the organization or the direct superior in the hierarchy.

**Regions:** The number of regions created under this business entity.

Sites: The number of sites created under this business entity.

Groups: The number of groups created under this business entity.

Users: The number of users that this business entity has.

**Serviced:** States whether a service provider (SP) will provide management services for its organizations encompassing device management services (e.g. device inventory, scheduled tasks, and tag management) and license management as well as organization management such as site and group maintenance.

Created Time: The time that the business entity was created.

You can customize the field by clicking ...at the far right of the table.

List	Structure	Floor Plan 3rd-Par	ty Management Servi	ce					+ Create B	usiness	Organ	ization
Organization Fi	Iter +											
Activated	Name	Business Partner	Regions	Sites	Groups	Users	Serviced	Created Time 🗸				
0	Store-No.2	US-branch			1		0	2023-01-09 17:39:40	Ø	ß		Ū
0	Store-No.1	US-branch	1	1	2	1	0	2022-07-08 13:49:56	Ø	ß		Ŵ
0	US-branch	DTW			3	2		2022-07-08 13:48:08		Ø	ß	

Total Qty : 3 1... 🗸 record / per page 🦷 < 📋 >

## **Create Service Provider**

Depending on your account and role (i.e. an OBU with the admin or manager role),

### you can create a service provider (SP) by filling in the following information:

Create Service Provider	×
Business Title *	
1 ~ 128 Characters	
Business Logo Upload logo image	
Country *	Time Zone *
Please Select 🗸	Please Select ~
Address *	
1 ~ 128 Characters	
Service providers (SP) will provide device ma tasks, and tag management) and license man such as site and group maintenance. Contact Information Contact Person Email *	nagement services (e.g. device inventory, scheduled nagement as well as organization management
Contact Person Name *	Phone *
1 ~ 32 Characters	1 ~ 32 Characters

**Business Title:** Enter the name of the service provider, using a maximum of 128 alphanumeric characters.

Cancel

**Business Logo:** Upload the company's logo with an image file of the PNG and JPG format with less than 2 megabytes in size.

**Country:** Select the country of the business organization.

**Time Zone:** Select the time zone of the business organization.

**Address:** Enter the address of the business site with street name, number, and state, using a maximum of 128 alphanumeric characters.

Enter the contact information which will be used to create an account in the system automatically with the admin role for managing the service provider:

### **Contact Information**

**Contact Person Email:** Enter the email of the contact person.

**Contact Person Name:** Enter the name of the contact person. **Phone:** Enter the phone number of the contact person.

## Create Business Organization

Depending on your account and role (i.e. an SP with the admin or manager role), you can create a business organization (ORG) by filling in the following information:

Create Business Organization			×
Business Title *			
1 ~ 128 Characters			
Business Logo			
Upload logo image			
Country *	Time Zone *		
Please Select 🗸	Please Select		$\sim$
Address *			
1 ~ 128 Characters			
Service providers (SP) will provide device m tasks, and tag management) and license ma such as site and group maintenance.	anagement services (e.g anagement as well as or	g. device invent ganization mar	ory, schedulec nagement
Contact Person Email *			
Contact Person Name *	Phone *		
1 ~ 32 Characters	1 ~ 32 Characters		
		Cancel	Submit

**Business Title:** Enter the name of the business organization, using a maximum of 128 alphanumeric characters.

**Business Logo:** Upload the company's logo with an image file of the PNG and JPG format with less than 2 megabytes in size.

**Country:** Select the country of the organization.

**Time Zone:** Select the time zone of the business organization.

Address: Enter the address of the business site with street name, number, and state,

using a maximum of 128 alphanumeric characters.

Enable the following option to let the SP manage the organization and its assets: Service providers (SP) will provide device management services (e.g. device inventory, scheduled tasks, and tag management) and license management as well as organization management such as site and group maintenance. Once this option is enabled, it would be indicated in the organization list as serviced and the organization shown in the hierarchical representation of the left pane will be highlighted with a green node.

### **Contact Information**

If you enable the above option, select contact person(s) that will be authorized to manage the organization. Furthermore, the contact person(s) account should be created and activated in advance under the respective service provider (SP). The number of contact people will be reflected in the **Organization Account Summary Organization Account Summary** of the dashboard.

If you *do not* enable the above option, enter the following contact information which will be used to create an account with the admin role automatically in the system to manage the business organization:

### **Contact Information**

Contact Person Email: Enter the email of the contact person.Contact Person Name: Enter the name of the contact person.Phone: Enter the phone number of this contact person.

**Note:** If you later enable the above option to allow a service provider (SP) to manage an organization and its assets, the above account of a contact will be disabled from the system, which prevents its login to the system.

# **Organization Details**

The **Organization Details** page provides both tabular and structural representation of the information on the organization. It consists of the following tabs: List, Structure, and Floor Plan.

## List

The **List** tab displays business entities that are managed by the account user. It may contain entities such as service providers (SP), organizations (ORG) or operation

business unit (OBU) depending on the level of the hierarchy of the account user's registered entity. For example, if the account user is registered as an SP, the list may contain organizations that are managed by the parent SP. The table displays the following information:

**Activated:** Self-registered or invited D-ECS accounts must click on the verification link in the email to finish activation.

Name: The name of the organization.

**Business Partner:** The business entity that sold devices to the organization or the direct superior in the hierarchy.

**Regions:** The number of regions created under this business entity.

Sites: The number of sites created under this business entity.

Groups: The number of groups created under this business entity.

Users: The number of users that this business entity has.

**Serviced:** States whether a service provider (SP) will provide management services for its organizations, including device management services (e.g. device inventory, scheduled tasks, and tag management) and license management as well as organization management such as site and group maintenance. This information will also be reflected in the **Organization Account Summary** of the dashboard. **Created Time:** The time that the business entity was created.

You can customize the field by clicking ...at the far right of the table. Depending on your permission role (i.e. Admin and Manager only by default), you can edit an entity or create regions or sites under this entity. To delete an entity, you need to be a superior in the hierarchy. (Refer to **Structure** below for site and region creation.)

# Structure

The **Structure** tab displays the hierarchical representation of physical locations. It uses regions, sites, and groups to give geographical visualization of devices under a business entity. If you are a service provider, organizations shown in the left pane with green nodes allow you to maintain their regions, sites and groups; on the other hand, organizations shown in the left pane with gray nodes prevent management from a service provider.

**Note:** Users with the monitor role cannot create or maintain regions or sites by default.

Organization Details		C
List Structure	Floor Plan	♥         Create Site         ∨
Search Q	≪ 🚯 Region (1) 📀 Site (1) 😂 Group (3)	
SP US-branch	Collapse   Expand	
ORG Store-No.2	GRG Store-No.1	
ORG Store-No.3	ei>ei>ei	
ORG Store-No.4	🖻 🕲 West-side	
	E 🕅 Parking area	
	🤤 server-group	
	😝 Gateway-devices	

### Region

Regions denote geographic divisions of a business entity. They have a broader perspective than sites. An organization can have multiple regions and sites to represent its physical locations. For example, a company may have many branch offices (site) in different parts of the world (region).



To create a region, click Create Region

corner. The **Create Region** screen appears, fill in the following information to create a new region:

**Region Name:** Name this region. Enter alphanumeric characters with a maximum of 64 characters.

**Parent:** Select the parent region for this region from available regions under this organization. You can create a region directly under the intended organization or under any region (but not a site) contained within this organization.

with them will be displayed.	the selected parent region. Only regions without any site(s) associat
egion Name *	Parent *
1 ~ 64 Characters	Please Select
egion Name * 1 ~ 64 Characters	Please Select

### Site

Sites are placed under a region or directly under a business entity. Unlike a region, a site details location addresses of devices under an organization.



in the upper-right

corner. The Create Site screen appears, fill in the information to create a new site.

**Site Name:** Name this site. Enter alphanumeric characters with a maximum of 64 characters.

**Parent:** Select the region to which the site belongs.

**Country:** Select the country of the site.

To create a site, click Create Site

Time Zone: Select the time zone of the site.

**Address:** Enter the address of the site with street name, number, and state, using a maximum of 128 characters.

**Contact Person:** Select one of the user accounts created for the organization to be the contact person.

Create Site				$\times$
Site Name *		Parent *		
1 ~ 64 Characters		Please Select		$\sim$
Country *		Time Zone *		
Please Select	~	Please Select		$\sim$
Address *				
1 ~ 128 Characters				
Contact Information				
Contact Person *				
Not Available				
			Cancel	Submit

## Group

**Group** allows you to divide the devices in the organization into groups. You can organize your devices into groups based on physical placement (under a site) or functional perspective (under a business entity, i.e. service providers or organizations) according to your needs. After a group is created, you can then move a device to the group (refer to **Move Devices to a Group** in **Device Management**).

Note: Group management is not granted to users with the monitor role by default.

To create a group, click **Create Group** 

+ Create Group

in the upper-right

corner. The **Create Group** screen appears, fill in the information to create a new group.

Group Name: Name the group.

**Create to:** Select either to place the group under the organization (parent entity) or a physical site of the organization. If you select **Create a group to a site**, select a region from the list of available regions under the organization and the designated site for the group.

**Available Users:** Select a user whose role does not inherently permit group management (i.e. monitor) from the list to allow management of the group and devices assigned to the group to this user.

Create Group		×
Group Name *		
Create To		
<ul> <li>Create a group to Selenium_ORG</li> <li>Create a group to a site of Selenium_C</li> </ul>	DRG	
Region *	Site *	
Please Select	V Please Select	~
Jser *		
	C	ancel Submit
		ß
ter a group is created, click o	n it to display options: Ec	dit Group 🥤 an
-0-		

Group	2 🛍 ×
Device Count	1
Create Time	2022-09-14 17:07:53
Region	Group

**Note:** A Group cannot be deleted if there are devices assigned to that group.

# Floor Plan

The Floor Plan tab allows you to visualize the location of the managed devices on a site map. It helps visualize the geographic data of your devices to allow for quick identification of the location of the devices on the deployment site.



**Note:** Users with the monitor role cannot create or maintain regions or sites by default.

To create a floor plan:

1. Click **Start** in the middle of the screen or click **+ Add a new floor plan** at the top.

The screen shows a blank canvas. To change the canvas size, click	Ī	and
specify the width and height in pixels.		

Canvas Size	>
<ul> <li>Default (A4): Width 2480 pi:</li> <li>Customize</li> </ul>	xels × Height 3508 pixels
Width (pixels) *	Height (pixels) *

2. Click to upload an image of the deployment site from your local drive.

Note that it must be in JPG, JPEG, or PNG file format. Then click  $\bigcirc$  to lock the background image from being reshaped and moved around on the canvas.
3. Click or is to create an object on the canvas to identify your device (you may also use other provided device icons) and drag it around to reflect its position on the site. You may also use the available symbols for your devices.

Then click  $\mathbf{T}$  to enter a descriptive name for this device. Use Move  $\bigstar$  to move your objects on the canvas.

- 4. Right-click on the created object and click **Device Type** to select the device's type. Right-click on the created object and click **Link with** to select a device from the device list for the organization. Once a device is linked successfully, the object will be in different colors to inform you of its status, for example, green for online and gray for offline.
- 5. Click **Save** to save your drawing. Then click **Leave Edit Mode** to view your drawing.
- 6. In the View mode, you can create additional plans by clicking + and manage

your existing plans by clicking O. To view and edit other plans for an organization, select the desired plan from the list of available plans.

Floor Plan #20 🗸	+ 🕸
Floor Plan #20	
Floor Plan #19	
Floor Plan #18	
Floor Plan #17	

### **Organization Users**

This page allows you to manage all your users. You can create, edit, and delete users. You can use role-based access control to provide users with a subset of privileges to access the system instead of making them full local administrators.

#### To add a user on the server:

- Click Organization > Organization Users, then select the All Users tab. Select the organization whose assets the user should have permission to access.
- 2. Click Add User  $\overset{Q_+}{\simeq}$  in the upper-right corner, and enter the following

information:

Name: Enter a username.

Phone: Enter the contact phone number.

Email: Enter the contact email.

**Role:** Select the permission role. Refer to the following descriptions of different levels of access roles.

- 3. **Managed Site / Group:** Select the device group that can be managed by the user. This option is not available for creating an administrator.
- 4. Click Submit.

**Note:** You can only create users with the **Admin** role for a subordinate. Users with roles other than the **Admin** can only be created by an administrator within the same organization.

After users are created, they will receive invitation emails that will provide verification links for account activation.

You can also modify the information of a user by clicking  $\equiv$  in the upper-right

corner of the specific user. The options include View Profile, Edit, Resend Welcome Email and Delete User. The **Edit** option allows you to modify user information about the user as described in the above user creation settings. The **View Profile** option displays the information of the user including his organization, phone number, time that this user was created, his account email, and groups that he is allowed to manage. The **Resend Welcome Email** sends the invitation email again for the user to activate his account. The **Delete User** option removes this user.

The system supports the following roles:

Admin: This role can manage all members except administrators of its organization, including granting and revoking privileges. The admin account can only be created by a superior of the D-ECS hierarchy. For example, an administrator of an organization can only be created by an administrator or a manager from a service provider (SP). Likewise, an administrator of a service provider (SP) can only be created by an administrator or a manager from a service by an administrator or a manager from an operation business unit (OBU). The following table describes the default set of privileges for the Admin role:

Privilege Category	Privileges	Enabled by Default
Device Discussitie Test	Deufeure die en eties en deuiese	No.
Device Diagnostic lest	Perform diagnostics on devices	Yes
	(refer to <b>Diagnostics</b> in <b>Device</b>	
	Management).	
Device Operations	Perform operations on devices	Yes
	including tasks in device	
	management such as device	
	tagging, group assignment,	
	device activation and	
	deactivation and license	
	extension (refer to Navigate	
	through the Device	
	Management and Operations	
	in <b>Device Management</b> ).	
Device Import	Perform device import to the	Yes
	inventory tab (refer to	
	Inventory in Device	
	Management).	
License Management	License management functions	Yes
	such as license delivery,	
	deletion, and retrieval (refer to	
	Licenses).	
User Management	User management functions	Yes
	such as adding, deleting, or	
	modifying users (refer to	
	Organization Users in	
	Organization).	
Organization	Organization management	Yes

Management	functions such as adding,	
	deleting, modifying	
	organizations as well as	
	associated region/site/group	
	management (refer to	
	Organization).	
Scheduled Task	Create and cancel scheduled	Yes
Management	tasks (refer to	
	Scheduled Tasks in Devices ).	
Alert Rules	Create and delete alert rules to	Yes
	monitor device status and	
	traffic usage (refer to Alert	
	Rules in Devices).	
Status Report Time	Set up automatic status	Yes
	reporting (refer to Status	

**Manager:** A manager can also manage all members of its organization except the administrators and other managers. The following table describes the default set of privileges for the Manager role:

Privilege Category	Privileges	Enabled by Default
Device Diagnostic Test	Perform diagnostics on devices	Yes
	(refer to <b>Diagnostics</b> in <b>Device</b>	
	Management).	
Device Operations	Perform operations on devices	Yes
	including tasks in device	
	management such as device	
	tagging, group assignment,	
	device activation and	
	deactivation and license	
	extension (refer to Navigate	
	through the Device	
	Management and Operations	
	in Device Management).	
Device Import	Perform device import to the	Yes
	inventory tab (refer to	
	Inventory in Device	

	Management).	
License Management	License management functions	Yes
	such as license delivery,	
	deletion, and retrieval (refer to	
	Licenses).	
User Management	User management functions	Yes
	such as adding, deleting, or	
	modifying users (refer to	
	Organization Users in	
	Organization).	
Organization	Organization management	Yes
Management	functions such as adding,	
	deleting, modifying	
	organizations as well as	
	associated region/site/group	
	management (refer to	
	Organization).	
Scheduled Task	Create and cancel scheduled	Yes
Management	tasks (refer to	
	Scheduled Tasks in Devices ).	
Alert Rules	Create and delete alert rules to	Yes
	monitor device status and	
	traffic usage (refer to <b>Alert</b>	
	Rules in Devices).	
Status Report Time	Set up automatic status	Yes
	reporting (refer to Status	
	Report Time in Devices ).	

**Supervisor:** A supervisor cannot manage any member of its own organization. The following table describes the default set of privileges for the Supervisor role:

Privilege Category	Privileges	Enabled by Default
Device Diagnostic Test	Perform diagnostics on devices	Yes
	(refer to Diagnostics in Device	
	Management).	
Device Operations	Perform operations on devices	Yes
	including tasks in device	

	management such as device	
	tagging, group assignment,	
	device activation and	
	deactivation and license	
	extension (refer to Navigate	
	through the Device	
	Management and Operations in	
	Device Management ).	
Device Import	Perform device import to the	No
	inventory tab (refer to	
	Inventory in Device	
	Management).	
License Management	License management functions	No
	such as license delivery,	
	deletion, and retrieval (refer to	
	Licenses).	
User Management	User management functions	No
	such as adding, deleting, or	
	modifying users (refer to	
	Organization Users in	
	Organization Users in Organization).	
Organization	Organization Users in Organization). Organization management	Yes
Organization Management	Organization Users in Organization). Organization management functions such as adding,	Yes
Organization Management	Organization Users in Organization). Organization management functions such as adding, deleting, modifying	Yes
Organization Management	Organization Users in Organization). Organization management functions such as adding, deleting, modifying organizations as well as	Yes
Organization Management	Organization Users in Organization). Organization management functions such as adding, deleting, modifying organizations as well as associated region/site/group	Yes
Organization Management	Organization Users in Organization). Organization management functions such as adding, deleting, modifying organizations as well as associated region/site/group management (refer to	Yes
Organization Management	Organization Users in Organization). Organization management functions such as adding, deleting, modifying organizations as well as associated region/site/group management (refer to Organization).	Yes
Organization Management Scheduled Task	Organization Users in Organization). Organization management functions such as adding, deleting, modifying organizations as well as associated region/site/group management (refer to Organization). Create and cancel scheduled	Yes
Organization Management Scheduled Task Management	Organization Users in Organization). Organization management functions such as adding, deleting, modifying organizations as well as associated region/site/group management (refer to Organization). Create and cancel scheduled tasks (refer to	Yes
Organization Management Scheduled Task Management	Organization Users in Organization). Organization management functions such as adding, deleting, modifying organizations as well as associated region/site/group management (refer to Organization). Create and cancel scheduled tasks (refer to Scheduled Tasks in Devices ).	Yes
Organization Management Scheduled Task Management Alert Rules	Organization Users in Organization). Organization management functions such as adding, deleting, modifying organizations as well as associated region/site/group management (refer to Organization). Create and cancel scheduled tasks (refer to Scheduled Tasks in Devices ). Create and delete alert rules to	Yes Yes No
Organization Management Scheduled Task Management Alert Rules	Organization Users in Organization). Organization management functions such as adding, deleting, modifying organizations as well as associated region/site/group management (refer to Organization). Create and cancel scheduled tasks (refer to Scheduled Tasks in Devices ). Create and delete alert rules to monitor device status and traffic	Yes Yes No
Organization Management Scheduled Task Management Alert Rules	Organization Users in Organization). Organization management functions such as adding, deleting, modifying organizations as well as associated region/site/group management (refer to Organization). Create and cancel scheduled tasks (refer to Scheduled Tasks in Devices ). Create and delete alert rules to monitor device status and traffic usage (refer to Alert Rules in	Yes Yes No
Organization Management Scheduled Task Management Alert Rules	Organization Users in Organization). Organization management functions such as adding, deleting, modifying organizations as well as associated region/site/group management (refer to Organization). Create and cancel scheduled tasks (refer to Scheduled Tasks in Devices ). Create and delete alert rules to monitor device status and traffic usage (refer to Alert Rules in Devices).	Yes Yes No
Organization Management Scheduled Task Management Alert Rules Status Report Time	Organization Users in Organization). Organization management functions such as adding, deleting, modifying organizations as well as associated region/site/group management (refer to Organization). Create and cancel scheduled tasks (refer to Scheduled Tasks in Devices ). Create and delete alert rules to monitor device status and traffic usage (refer to Alert Rules in Devices). Set up automatic status	Yes Yes No Yes
Organization Management Scheduled Task Management Alert Rules Status Report Time	Organization Users in Organization). Organization management functions such as adding, deleting, modifying organizations as well as associated region/site/group management (refer to Organization). Create and cancel scheduled tasks (refer to Scheduled Tasks in Devices ). Create and delete alert rules to monitor device status and traffic usage (refer to Alert Rules in Devices). Set up automatic status reporting (refer to Status	Yes Yes No Yes

**Monitor:** A monitor cannot manage any member of its own organization. The following table describes the default set of privileges for the Monitor role:

Privilege Category	Privileges	Enabled by Default
Device Diagnostic Test	Perform diagnostics on devices	No
	(refer to Diagnostics in Device	
	Management).	
<b>Device Operations</b>	Perform operations on devices	No
	including tasks in device	
	management such as device	
	tagging, group assignment,	
	device activation and	
	deactivation and license	
	extension (refer to Navigate	
	through the Device	
	Management and Operations in	
	Device Management ).	
Device Import	Perform device import to the	No
	inventory tab (refer to	
	Inventory in Device	
	Management).	
License Management	License management functions	No
	such as license delivery,	
	deletion, and retrieval (refer to	
	Licenses).	
User Management	User management functions	No
	such as adding, deleting, or	
	modifying users (refer to	
	Organization Users in	
	Organization).	
Organization	Organization management	No
Management	functions such as adding,	
	deleting, modifying	
	organizations as well as	
	associated region/site/group	
	management (refer to	
	Organization).	
Scheduled Task	Create and cancel scheduled	No

Management	tasks (refer to	
	Scheduled Tasks in Devices ).	
Alert Rules	Create and delete alert rules to	No
	monitor device status and traffic	
	usage (refer to Alert Rules in	
	Devices).	
Status Report Time	Set up automatic status	No
	reporting (refer to Status	
	Report Time in Devices ).	

### Permission

To display the permission of a user based on its role, go to **Organization > Organization Users**, then select the **Permission** tab. Function access rights are displayed in headings to show the corresponding privileges for each role. The function access rights are explained below:

Device Diagnostic Test	Perform diagnostics on devices (refer to Diagnostics in
	Device Management).
Device Operations	Perform operations on devices including tasks in device
	management such as device tagging, group assignment,
	device activation and deactivation and license
	extension (refer to Navigate through the Device
	Management and Operations in Device Management).
Device Import	Perform device import to the inventory tab (refer to
	Inventory in Device Management).
License Management	License management functions such as license delivery,
	deletion, and retrieval (refer to Licenses).
User Management	User management functions such as adding, deleting,
	or modifying users (refer to Organization Users in
	Organization).
Organization	Organization management functions such as adding,
Management	deleting, modifying organizations as well as associated
	region/site/group management (refer to Organization).
Scheduled Task	Create and cancel scheduled tasks (refer to
Management	Scheduled Tasks in Devices).
Alert Rules	Create and delete alert rules to monitor device status
	and traffic usage (refer to Alert Rules in Devices).
Status Report Time	Set up automatic status reporting (refer to Status
	Report Time in Devices).

# Activity Log

The Activity Log page displays all of devices' logs. The User Activity tab displays logs related to management operations and tasks performed by users. The Device Activity displays logs related to activities performed by system services and agents. Logs can be used to analyze device health and troubleshoot network connectivity as well as exam network security.

#### Note:

You can only view logs pertaining to the activities under your own organization. However, an account of a superior can view logs from its subordinates.

To view **User Activity** logs, click **Activity Log > User Activity**. The log entries contain the following information:

User – Username.

Email – Email of the user account.

**Role** – Privilege role of the user.

Activity – Operations performed by the user, e.g. device import, ping or trace route.

Info – Detailed descriptions of the activity.

Time – The timestamp of the user activity.

You can filter these logs based on username and time. To create a filter, click

Filter

 $^{
m J}$ at the top of the table.

To view **Device Activity** logs, click **Activity Log > Device Activity**. The log entries contain the following information:

Device Name – The name of the device.

Serial Number – Serial number of the device.

Model – Model name of the device.

**IP Address** – IP address assigned to the interface.

Severity – The degree of criticality.

Activity – Operations performed by the device, e.g. heartbeat received or reboot.

**Time** – The timestamp of the device activity.

You can filter these logs based on username and time. To create a filter, click

Filter

 $^{
m J}$ at the top of the table.

Critical	Indicates that the system is in critical condition
	when there are errors, failed operations, lost
	connections, etc.
Warning	Indicates conditions that may lead to errors,
	for example heartbeat timeout.
Normal	Indicates a normal condition when there are
	complete operations, heartbeat signal
	received, etc.

The following describes the log severity level from the highest to the lowest:

# Appendix

Device registration allows D-ECS to manage the device and control some settings on the device. For supported devices, go to **Devices > Device Profile**.

To register devices to D-ECS, you need to configure the relevant settings in the device configuration page as shown below:

Item	Setting
Device Management	Select Enable to allow management by D-ECS
Input Local Service URL	Input the management service URL:
	https://portal.decs.dlink.com/ACS/tr069
Input Local Server IP	Input the server address for processing STUN traffic:
STUN Traffic	portal.decs.dlink.com
Note: The service URL and	Server IP STUN Traffic should be modified accordingly

depending on the deployment architecture of the D-ECS system.

Configuration				
ltem	Setting			
Device Management	C Enable			
Input Local Service URL	https://portal.decs.dlink.com/ACS/tr069			
<ul> <li>Input Local Server IP STUN traffic</li> </ul>	portal.decs.dlink.com			

## **Revision Note**

FW Version	Revision No.	Description	Date
V1.2.4.2.20230106	V1.50	<ul> <li>Modify menu icon</li> <li>Modify the minimum value for the periodic report time interval</li> <li>Delete Device Profile page</li> </ul>	2023/01/09
V1.2.4.5.20230509	V1.51	<ul> <li>Take out the Wi-Fi AP and switch product category</li> </ul>	2023/05/12
V1.3.0.0.20241203	V1.60	<ul> <li>Modify D-ECS cloud icon</li> <li>Remove obsolete features.</li> </ul>	2024/12/05